

VOLUME 31, NUMBER 2 • OCTOBER, 1960

# **JUNIOR COLLEGE JOURNAL**

**American Association  
of Junior Colleges**

# JUNIOR COLLEGE JOURNAL

OFFICIAL ORGAN OF THE AMERICAN ASSOCIATION OF JUNIOR COLLEGES

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VOLUME XXXI

OCTOBER 1960

NUMBER 2

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*JUNIOR COLLEGE JOURNAL* is published monthly from September to May, inclusive. Subscription: \$4.00 a year, 50 cents a copy. Group subscriptions available to junior colleges at \$2.00 a year each: minimum of 10 to junior colleges with 20 or more full-time faculty, minimum of one-half total number of faculty to junior colleges with less than 20 faculty, minimum of 10 to classes of graduate students in junior college education. Communications regarding editorial matters should be addressed to James W. Reynolds, College of Education, The University of Texas, P.O. Box 7998, Austin 12, Texas. Correspondence regarding advertisements and subscriptions should be addressed to Edmund J. Gleazer, Jr., executive director of the American Association of Junior Colleges, 1785 Massachusetts Avenue, N.W., Washington 6, D.C. Entered as second-class matter November 22, 1925, at Washington, D.C., under the Act of March 3, 1879. Additional entry at Austin, Texas, August 20, 1949.

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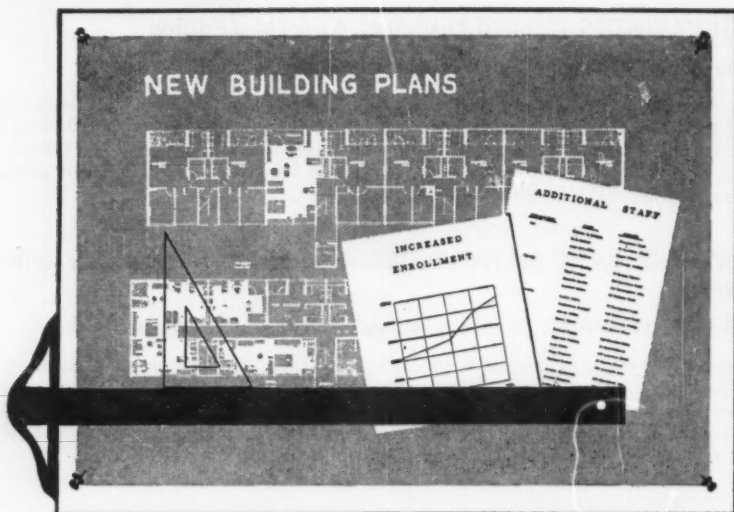
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# JUNIOR COLLEGE JOURNAL

VOLUME XXXI

OCTOBER 1960

NUMBER 2

41st Annual Convention, American Association of Junior Colleges, March 1-3, 1961, Washington, D.C.

## Community Colleges and Studies of Communities

JAMES W. REYNOLDS

A STUDY OF community-service programs in junior colleges was completed recently by the Editor of *Junior College Journal*. The study, based on depth investigations in 12 junior colleges in a widely distributed geographical area, concerned the nature of community service programs and the relative emphasis given to certain categories of community services. The study was made possible by a grant from the Cooperative Research Division of the U.S. Office of Education.

Among the categories receiving a negligible amount of attention in junior colleges was that of community studies for the purpose of identifying community educational needs. This finding came as a surprise since it was anticipated that educational institutions which pride themselves on satisfying such needs would devote a material amount of time and effort to such enterprises. While it is a possibility that the small sample of junior colleges included in the study allow for chance factors offsetting the validity of the finding, yet the question raised is nevertheless one that deserves consideration. Stated simply, the question is, "To what extent is curriculum building to satisfy educational needs in the community based on serious studies to determine these needs?"

One very frequently used study of this type is the community-wide occupational survey. The intent of such a study, as is commonly known, is the ascertaining of the incidence of various types of occupational classifications existing in the community, and the approximate need, numerically computed, for new personnel in these classifications.

Fortunately, there are agencies which frequently have this information such as chambers of commerce or state employment offices, but it is also true that frequently such information is out of date. Junior colleges seldom have the staff or resources to conduct such surveys from the beginning, or to bring up to date surveys that have been made earlier. There is, however, an opportunity to work cooperatively with interested agencies to accomplish such an undertaking.

The desirability for formal studies of community educational needs as a means of curriculum improvement comprehends a broader area than vocational education. The whole realm of general education presents an even broader challenge than is found in education for employment. Such categories as health, citizenship, appreciation of the fine arts, and an understanding at the layman's level of the

physical environment are illustrative of these needs.

There are no set patterns for studies to determine educational needs unique in a given community. Ingenuity is required for such investigations if they are to produce usable results. Many such studies have been conducted, though, and accounts of such efforts will be welcomed for publication in *Junior College Journal*.

Pressures and apathy, however, are recognized as deterrents to such community studies as those described here. One type of pressure has already been suggested: lack of staff and resources. Another pressure, closely related, is the necessity for establishing priorities in the matter of recipients of limited funds in the face of mounting costs and increasing enrollments. In such situations, there is pressure to accord the community service program a very low priority.

Apathy is a little more difficult to understand. In this respect, apathy results in narrow adult education programs, largely limited to vocational education and college credit courses. Such programs display little evidence of creativeness stemming from a comprehensive understanding of real educational needs of the community.

Up to this point, the community studies found to be deficient in junior colleges have been limited in their interpretation to efforts to gain a better understanding

of educational needs. Such an understanding, obviously, would lead to a broader educational program for adults served by the college. Another aspect of such studies as have been suggested is that of regarding the community as a laboratory for enriching the work done in the classroom. The survey, which was alluded to at the beginning of this editorial, revealed only a small amount of activity in this area.

Use of the community as a laboratory, while inclusive of so-called field trips, is broader than this device. Whereas the field trip contributes to learning primarily by passive observation, there is little or no activity concerned with positive participation as a student of social action and inter-relationships; little investigation at the level of the researcher into the physical environment either natural or contrived which surrounds the community; little effort to discover opportunities for business enterprises not now included in the community. Such activities as those presented for illustrative purposes constitute a genuine use of the community as a laboratory.

The junior college is increasingly regarded as a community college. It would seem, in this frame of reference, that an obligation exists for the staff of each institution to take a hard look at the present program to discover means for increasing studies in the community.

# Developing Cooperative Relationships Between the Junior College and Its Business Community

REX GORTON

BUSINESS REPRESENTS an important area of program development for most junior colleges. Based on the frequency of curriculum offerings, secretarial and general business rank first and second, respectively, among 36 curriculums offered in 560 junior colleges. Educators in these institutions, working with local businessmen, can make careful studies of specific needs for business education and build their courses on the analyzed requirements of persons employed in neighboring business firms. To accomplish this end, junior college educators have increasingly endeavored to further cooperative relationships between their programs and organized business groups representing the business interests of their communities.

Because a community centered program does not come about through mere chance, it must be planned with care and persistence. Basic to such planning is the identification of practices which will focus the energy and knowledge of educators and business groups on the development of an effective program of business education. The writer undertook to identify practices revealed by the literature designed to establish active relationships be-

tween school and community; to report activities used in the business education programs of 13 selected California public junior colleges for the purpose of establishing cooperative relationships; and to establish criteria, based on the practices identified above, to use in appraising the relationships between junior college business education programs and organized business groups.\*

This article will describe the activities revealed by the literature and by visits to the selected colleges. A second article will report the importance of 30 criteria, as judged by a panel of 80 experts, which were formulated for use in appraising cooperative relationships between junior colleges and community business groups.

In the literature of business education, the junior college, and school-community relationships, there are many examples of practices which may be classified in six groups: (1) under purposes, the importance of contributions that school and community can make to each other are stressed repeatedly; (2) references to ad-

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\* Business groups are defined as organized groups of men and women representing the business interests of the community in which the college is situated. The groups may be organized by the college, such as an accounting advisory committee, or may be a business association, such as the Insurance Agents Association, or a union representing organized labor.

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Formerly Assistant Dean of Business Education at San Diego Junior College, REX GORTON is now Principal of Midway Adult High School in San Diego, California.

ministrative organization indicate that schools interested in community relationships must have an administrative plan designed to achieve these relationships; (3) frequently cited in discussing programs of instruction are joint school-community sponsorship of workshops, seminars, forums, courses, and curriculums; (4) staff members' participation in the activities of community groups can, it is pointed out, help to insure the response of the instruction program to current needs; (5) under student personnel services are reported examples of school-community cooperation in sponsoring career days, vocational panels, plant visits, and scholarships, together with assistance in placement; (6) evaluation practices stress the need for schools to cooperate with interested groups in activities designed to measure the effectiveness of the instructional program.

Visits to the colleges were determined on the basis of 35 replies to an inquiry form mailed to 37 California public junior colleges. Thirteen of the colleges, reporting notable attention to cooperative relationships, were chosen for visitation. In identifying practices during a visit, the following procedures were observed: (1) review of college catalogs and accreditation applications; (2) examination of minutes of advisory committees, course outlines and faculty and student handbooks; and (3) interviews with college personnel and members of advisory committees and community business groups. In the interviews, college staff members and business representatives were asked to describe current practices designed to establish active cooperative relationships and to give an appraisal of the value of such practices.

#### PRACTICES CONCERNED WITH PURPOSES

Discussion of purposes of the junior college found in statements from college catalogs, accreditation applications, annual reports, and faculty handbooks stress the importance of service to the community, including the necessity of effective relationships between the business education department and community business groups. All of the colleges visited reported procedures for developing staff and community understanding and acceptance of the institutions' statements of purposes. Such practices include participation of faculty and business representatives in developing statements, periodic reviews and revisions by business and college representatives. At East Los Angeles City College, for example, the objectives of the business education program are subject to revision on the basis of suggestions by the college's advisory committees, consisting of business executives and business education experts. Junior colleges visited plan their programs to serve varied community needs, and all business groups which can profit from the services receive such assistance. Operational practices reported indicate that the colleges are serving every interested major business enterprise located in their communities.

Each college visited has a program based on its stated purposes as they relate to working with community groups. Specific practices which contribute to such consistency are reported in the following paragraphs.

#### PRACTICES CONCERNED WITH COURSES AND CURRICULUMS

Numerous reported practices indicate that new college business education pro-



grams may be initiated upon the request of business. At Oakland City College the need for new vocational curriculums is made known through the request of organized groups representing labor, management and industry. At other colleges new programs are initiated by offering "pilot courses" at the request of an interested industry. If these offerings prove successful, an advisory committee may be formed to develop a curriculum.

That the colleges visited are extensively engaged in program development with the support of business is evident from practices undertaken in developing curriculums and courses. Working in cooperation with the Bureau of Home Appliances of San Diego County, San Diego Junior College authorities developed a two-year curriculum in sales management for the appliance industry. At Los Angeles Harbor City College, advisory committees have developed two-year programs in accounting, office machines, business administration, secretarial, and industrial supervision and management. Life Insurance Sales, a single semester-length course, is sponsored by the Life Insurance Advisory Committee of Long Beach City College.

Requests from organized groups have resulted in the development of short-unit courses ranging from 10 to 40 hours in length. A typical course of 10 weeks, Introduction to Credit Union Operation, is sponsored by Diablo Valley College and the Mount Diablo Chapter of the California Credit Union League.

When the junior colleges included in this study recognize their community responsibilities for providing programs designed to further the welfare of specialized groups, they frequently conduct busi-

ness seminars and institutes, sales rallies, forums, clinics and business education days. Since 1952, San Diego Junior College and the San Diego Insurance Agents Association have held an annual Greater San Diego Insurance Day. An insurance trade journal describes a recent event as follows: "Some 600 representatives from production and company ranks alike assembled for the seventh annual Greater San Diego Insurance Day. This event is probably the most comprehensive and instructive of its kind anywhere in the country."

#### PRACTICES CONCERNED WITH ADMINISTRATIVE ORGANIZATION

Administrative organization plans for the achievement of an effective cooperative relationship program were reported as essential by each college visited, and all have personnel whose responsibilities include developing and maintaining active relationships with business. At one college the director is responsible for the utilization of advisory committees in maintaining close contact with business. At another college the coordinator of distributive education meets with advisory committees to receive assistance in the development of new courses and acts as a liaison officer between the college and business associations.

All of the colleges reported utilization of advisory committees in the development of their business education programs. At many of the colleges, advisory committees are functioning in real estate, traffic and transportation, insurance, service station management, and credit union management. With one exception, all of the colleges have a printed directory of members serving on their committees. Los

Angeles Harbor City College has bound copies by year of the minutes of the meetings of all its advisory committees.

#### PRACTICES CONCERNED WITH STAFF PARTICIPATION

Policies found in college catalogs, faculty handbooks, and accreditation applications, written and approved by administrators and instructors, furnish evidence that college staff members are encouraged to relate themselves to the community as college representatives. Each college has at least one staff member—one college has as many as seven of its full-time staff—participating actively in trade and professional associations representing business and distributive occupations. Typical of the values to be derived from participation in professional business associations is the comment made during an interview by one business education department chairman: "It is through contacts with businessmen and women that we keep up-to-date with trends in the business world. I discover new ideas which I can introduce into the classroom. The association offers real opportunity to contact leaders in the business world which in turn makes me a better teacher."

Numerous practices identified show that college representatives' contacts with business leaders assist in coordinating the objectives of business education with those of business. Typical of the values are: keeping the curriculums current with business changes, securing printed materials for instructional purposes, acquainting businessmen with the colleges' offerings, and developing new placement opportunities.

Reports from the colleges indicate that it is their policy to have instructors serve

on advisory committees. The policy statement in support of this practice at Pasadena City College is:

Because teachers and the work they do in the classroom influence so much the attitude of parents and employers, and the citizens generally, it is of vital importance that every teacher consider himself a key person and take active part in all advisory committee activity.

Several college representatives reported that informal relationships between staff members and individual businessmen not representing any organization contribute significantly to the business education program.

#### PRACTICES CONCERNED WITH STUDENT PERSONNEL SERVICES

Reports from all the institutions and business communities visited indicate that businessmen work closely with the colleges in their vocational guidance programs. Men and women representing specialized occupational areas serve as members of vocational panels and describe the necessary personal and professional qualifications for successful placement and advancement. Advisory committees often assist with the selection of students for a particular training program and provide on-the-job work experience leading to student self-appraisal.

College reports reveal that contacts with business groups have resulted in practices designed to strengthen the placement program. Such practices include: providing students with information on available jobs, assisting students to contact prospective employers, certification of qualified graduates, and conducting follow-up studies of former students. Instructors, coordinators, and

placement directors indicate that college staff memberships in business associations help to develop and maintain placement opportunities for business students in firms holding memberships in these associations.

Business education counselors at all the colleges meet with advisory committees in order to share in the values of committee activity. At San Diego Junior College, where each department chairman is responsible for counseling and programming students in his department, the chairmen serve as members of advisory committees representing their respective instructional programs. Reports received during interviews from persons concerned with counseling indicate that business counselors can profit professionally by joining business and trade associations under the educational membership classification. Many of these associations have established student scholarship awards for outstanding and deserving students in order to encourage these students to further their preparation for entering business.

#### PRACTICES CONCERNED WITH EVALUATION

The practice most often reported for evaluating plans leading to the achievement of cooperative relationships is the use of written reports by personnel responsible for maintaining community relations. These reports, describing the na-

ture and extent of cooperation, serve as an inventory or appraisal of what has been done and an indication of what needs to be done.

Business educators interviewed emphasize the part businessmen play in the evaluation of business education curriculums and courses. At Los Angeles Metropolitan College of Business, advisory committees meet annually to appraise the training programs and subject matter content in the light of current community and industrial employment. Organized surveys of pertinent community characteristics conducted jointly with business are regarded at all the colleges as essential to intelligent planning of community centered programs. At Long Beach City College 46 lay advisory committees with an aggregate lay membership of 400 continually survey occupational community trends.

Typical reactions, contained in interviews with representatives of organized business groups, reveal that the contributions of college business instructors to the educational aims of business groups is understood and appreciated by the representatives of these groups. Numerous practices reported indicate that the educational programs, designed by colleges and business groups, benefit the membership of the groups for which the design is intended.

## A Plan for Expanding Technical-Vocational Opportunities

FREDERICK C. KINTZER

THE EXPANSION of educational opportunities beyond high school is a basic problem facing the nation today. One of the recent commissions on higher education places this need in sharp focus in a 1947 two-volume publication, *Higher Education for American Democracy*, by asserting that "equal educational opportunity (should be available) for all persons, to the maximum of their individual abilities and without regard to economic status, race, creed, color, sex, national origin, or ancestry." Since that writing, other official statements have been made adding a note of urgency.

Statistical information leaves no doubt as to the need for action. According to figures released by the United States Department of Health, Education, and Welfare, less than 20 per cent of college-age students were attending college during 1949-50. This percentage is improving, but progress toward maximum participation in post-high school education is painfully slow.

One of the reasons four out of five stu-

dents stop their education after high school graduation is financial. About 200,000 of the academically brightest high school students who, for their own sakes and the country's well-being, should go to college fail to do so because of lack of funds. This figure does not take into account the many thousands of average students who are discouraged from further training for the same reason. Lack of post-high school institutions within convenient reach of large segments of population, and the corresponding lag in well defined technical-vocational programs are still further reasons.

The rapid spread of community-junior colleges which sponsor technical-vocational programs is an optimistic sign. Courses in these programs are usually concerned with a specialty within one of the professional fields, as clerical training is related to business administration, or as surveying is an area of specialization within engineering. In every case, these technical-vocational curriculums are developed from a community need.

In the state of Washington, where there are ten community junior colleges to implement community potential, technical-vocational programs flourish: auto mechanics at Columbia Basic College in Pasco; cosmetology at Everett Junior College; vocational agriculture at Skagit Val-

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FREDERICK C. KINTZER was the former administrative head of two of Washington's junior colleges—Centralia College and Olympic College. He is now serving in the Kellogg Foundation Leadership Program as Visiting Associate Professor at the University of California at Los Angeles.

ley College in Mount Vernon; and a school of cookery at Clark College in Vancouver—all are examples of occupational training involving less than the four or more years associated with the traditional professional fields. Olympic College in Bremerton, Washington, has responded to community needs in semi-professional training with an Associate in Technical Arts Degree program which allows credit toward the degree for work experience in addition to courses taken on and off campus. It is the purpose here to present the Associate in Technical Arts Degree as one solution to the complex problem of providing appropriate post-high school education.

With the establishment of the technical degree program in the 1951-52 academic year, Olympic College was responding to an obvious community need for a supplementary educational program for men and women employed in the Puget Sound Naval Shipyard. Although the training division of the shipyard maintained a well-organized educational program related to job status improvement, it was recognized soon after the creation of the college in 1946 that additional courses of a general academic and cultural nature taught by the college staff might provide the balanced educational diet desired. Thus, a joint committee was set up to explore the possibilities.

The initial technical degree program was announced in the 1951-52 catalog. According to the basic formula, 45 quarter credits or one complete year of the two-year technical degree program were granted upon the presentation of a diploma of graduation from the Shipyard Apprentice School. The final 45 quarter credits were to be earned from courses

given by members of the regular college faculty on or off campus. No specific courses were required in the final 45 quarter credits, but candidates were counseled to elect a wide variety of classes. The intention was to provide students with a wider educational experience and assist them to relate their strong technical training to broader areas of knowledge. While the program was designed particularly for Apprentice School graduates, others who had various types of trade and military training experiences were given advance credit within the first year of the technical degree. Although the manual issued by the American Council on Education for the evaluation of military training programs proved adequate, evaluation of other trade training experiences seemed to be increasingly difficult. The basic program provided little incentive for large numbers of shipyard workers who wanted a uniform system of providing credit toward the technical degree for the hours they were spending in the regularly offered yard training classes. College and shipyard training officials worked independently on solutions over a period of several years and again joined in a series of exploratory meetings late in the 1957-58 college year. The following expanded program for the Associate in Technical Arts Degree was announced in February, 1952, with the beginning effective date of September, 1959.

#### *Associate in Technical Arts Degree:*

The Associate in Technical Arts Degree will be granted to students who have completed the following work.

#### A. An approved Two-Year Technical-Vocational Course as follows:

1. Field of concentration may be in art,



business education, or junior engineering.

2. Not more than 15 hours of courses numbered below 100 will be accepted.
3. Student must have a 1.5 grade point average.

or

- B. Graduates of the Puget Sound Naval Shipyard Apprentice School or students with similar training (equivalent of 45 credit hours) who have acquired definite skills and techniques which are comparable to course material taught in college or any degree-training technical institution and have filed in the registrar's office a record of such technical training must meet the following requirements:

- 45 quarters hours at Olympic College
- 5 hours in English
- 5 hours in social science or the humanities
- 5 hours in mathematics or science

- C. Puget Sound Naval Shipyard employees who have not completed the Apprentice School program and have filed a complete record in the registrar's office may receive a maximum of 30 quarter hours credit in work experience as follows:

- One year of experience at journeyman level in apprenticeship trade ..... 15 credits
- Each additional year, up to five ..... 1 credit
- One year of experience as a supervisor or instructor ..... 5 credits
- Each additional year, up to five ..... 1 credit

Fifteen (15) quarter hours credits in vocational training may be earned by attending vocational courses. If not Olympic College sponsored, these must be evaluated by the vocational director of the college.

Additional requirements as follows:

1. Student must have completed 45 quarter hours at Olympic College, including the following:
  - a. 5 hours in English
  - 5 hours in social science or the humanities

5 hours in mathematics or science

or

- b. He must have followed the prescribed courses recommended by the department.
2. Not more than 15 hours of courses mentioned below 100 will be accepted.
3. Student must have 1.5 grade point average.

Plan "A" of the Associate in Technical Arts Degree program lists technical-vocational courses given at Olympic College. Others, notably a curriculum in distributive education, are in the planning stages. Many of the courses involved apply toward the Associate in Arts or Science degrees and hence toward the traditional baccalaureate degrees. Courses numbered under the 100 series may not apply toward the B.A. or B.S. degrees.

Plan "B" is designed for graduates of the Puget Sound Naval Shipyard Apprentice School or students with similar training. These men and women may earn up to 45 quarter credits equivalent to the complete first year of the technical degree. Plan "B," like the other two, requires work in English, social sciences or humanities, and mathematics or science to be taken in the last 45 quarter credits or second year of the degree program. All courses taken at Olympic College, except those transferable under the 100 series, are transferable to senior institutions.

Under Plan "C," shipyard employees who have not completed the apprentice school program may for the first time earn credits toward a college degree. Requirements are broadened for these people by allowing a maximum of 30 quarter credits in work experience and 15 quarters in vocational training classes operated by the training division of the shipyard. Work experience in other trades will be trans-

lated into quarter credits as outlined. The second year of the technical degree program is spent on campus in required areas of study that are vitally different from the first year of vocationally concentrated effort. Since some candidates for the technical degree decide in their second year at Olympic College to work toward a baccalaureate degree, they are allowed, then, to follow the prescribed courses recom-

mended by the appropriate department.

Since the establishment of the Associate in Technical Arts program, over 70 individuals have been awarded the degree from Olympic College. With the initial step thus described and the subsequent expanded plan, Olympic College is developing a major objective of community-junior colleges by establishing well-defined technical-vocational opportunities.

# An Experiment in Large Class Instruction

BASIL H. PETERSON

IN THE SUMMER of 1957 Orange Coast College began to plan for an expanded enrollment.<sup>1</sup> The college believed it important for the teaching staff to instruct the largest possible number of students, but in achieving this end it was deemed essential to maintain and, if possible, improve the quality of instruction. An outcome of the initial planning workshop of faculty and administration led to the decision to conduct and evaluate on an experimental basis large classes in United States history.

For several semesters the experiment was conducted with large classes of 250 students meeting in the auditorium. It was decided that these classes must be something more than the usual large lecture class. The following steps were taken to insure this result:

1. The instructor, serving as lecturer, was given ample time to prepare for each class meeting.
2. A course assistant was provided to help during lecture hours, to prepare visual materials, and to keep student records.
3. Visual aids were made available for the instructor to use at greatest advantage.
4. Students met in a large group for lecture two hours each week and one hour in the small groups. (25-30).

5. The entire course was coordinated by the lecturer meeting each week for one hour with the instructors of the small groups.

## EVALUATING THE EXPERIMENT

At the end of each large class an evaluation was made resulting in the following general conclusions:<sup>2</sup>

1. Student reaction was overwhelmingly in favor of the "large" as opposed to the usual "small" class.
2. More than 80 per cent of the students enrolled in large classes stated they learned as much or more than they assumed was learned in small classes.
3. The drop-out rate of students in large and small classes was approximately the same.
4. More than 90 per cent of the students enrolled in the large class experiment indicated they would recommend the large class to fellow students.
5. Less than five per cent of those enrolled for the large class experiment chose to enroll for the small class the following semester in order to complete the second half year of the course.
6. A standardized United States history examination given to the large history class and to all classes of the standard small type at the end of the semester showed that students as a group from the large class scored slightly higher than those from small groups. The difference

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BASIL H. PETERSON is President of Orange Coast College, Costa Mesa, California. He has been president of both the California Junior College Association and the American Association of Junior Colleges.

<sup>1</sup> B. H. Peterson and Donald C. Bridgman, "Gearing to an Expanded Enrollment," *Junior College Journal*, XXIX, 329-331.

<sup>2</sup> A more comprehensive and objective evaluation of this type of instruction is needed. Application for a grant for this purpose has been filed.

in performance was not statistically significant.

The results of the large experimental classes were so encouraging that the decision was made to build a large lecture-demonstration hall especially designed for the most effective instruction of large groups. The "Forum" was completed and put into use in January, 1960. It was carefully designed as a cooperative project involving faculty, administration, and architects.

#### *The Forum*

As its name indicates the Forum has elevated seats forming a sector of a circle. None of the 300 seats is farther from the instructor than 50 feet.

All equipment is electronically operated and may be controlled from either the projection alcove or from the instructor's lectern. A sliding panel blackboard may be prepared backstage prior to the class and slid into position between class periods.

#### *Equipment at Speaker's Lectern*

With push button control the instructor at the lectern may operate the following equipment:

- Tape recorder
- Turntable (16 inch)
- Wireless microphone
- Radio (both AM and FM)
- Control to the height of podium
- Four separate volume controls for:
  - Podium Speaker (raise volume)
  - Lavalier Microphone
  - Podium Speaker (lower volume)
  - Wireless Microphone
- Two controls for the separate stereophonic speakers
- Controls for house lights; screen; curtain; spotlights

- Signal lights to projection alcove (green and red)

Provision to operate two different projectors (located in projection alcove) equipped with automatic slide changes.

#### *Equipment in Projection Alcove*

The following equipment is located in the projection alcove in the rear of the lecture hall:

- 16mm sound movie projector with zoom lens
- Two 35mm slide projectors with long throw lenses (7½")
- One filmstrip projector (5" lens)
- Tape recorder
- Turntable (to be installed)
- Electric pointer
- Signal lights (red and green)
- Control of house lights; screen; curtain; spotlights
- One opaque projector with 42" lens
- Microphone input with table mike

#### *Cost*

The actual costs of the Forum, not including architect fees, were as follows:

|   |                 |
|---|-----------------|
| General construction contracts                  | \$156,089       |
| Seating contract (upholstered, with table arms) | 11,410          |
| Electronic lectern                              | 12,458          |
|   | <hr/> \$179,957 |

Number of seats—300

Cost per pupil station—\$599.86

#### *Teacher Requirements*

An exceptional teacher is required as lecturer in order to promote superior instruction with large classes. He must be a person with imagination, an organizer, a dynamic speaker, and one who can motivate students. In a sense, he must be a showman of a sort. Needless to say, he must be a hard worker, willing to devote the necessary time to prepare thoroughly for class meetings.

An essential part of large class instruction is providing a course assistant. Such a

person must be mature and competent. At the present time, a half-time employee is provided for two lecture hours per week, and for four lecture hours per week a three-fourths time assistant is provided.

#### *Teacher Loads\**

The formula presently used in computing teacher loads for those participating in large class instruction is as follows:

Lecturer—actual classroom hours multiplied by two.

Small Section Leader—actual classroom hours; one extra class hour included if teacher has five or more sections.

Lecturer and Section Leaders—One hour's credit granted for coordination meeting each week.

#### *Teacher Saving*

A substantial saving in teacher time is realized in providing instruction for 600 students in the United States history course as follows:

| <i>Large Class</i>   |                      | <i>Standard Small Class</i>                     |
|--|----------------------|---|
|  | <i>Teacher Hours</i> |   |
| 2 large sections per week                                  | 8 hrs/wk             | 35 students per section—<br>17 sections meeting |
| 18 small sections per week (34 per<br>class—3 instructors) | 21 hrs/wk            | 3 hours per week;                               |
| Coordination hrs.  | 4 hrs/wk             | 51 teacher hours per week.                      |
| Total teacher hours per week                               | 33                   |   |

A total of 18 teacher hours per week is saved which means the teaching staff can be utilized to serve more students. It may not necessarily result in a saving of money expenditure; teaching assistants, visual aids, etc. tend to increase costs.

it possible to utilize the competencies of instructors to the best advantage.

#### *Present Use of Forum*

During the fall semester of 1960 the following classes are scheduled for the Forum during the day:

| <i>Class</i>                    | <i>Hours Per Week Per Student</i> |                      |              |
|---------------------------------|-----------------------------------|----------------------|--------------|
|                                 | <i>Large Group</i>                | <i>Small Section</i> | <i>Units</i> |
| U.S. History                    | 2                                 | 1                    | 3            |
| Introductory Psychology         | 1                                 | 2                    | 3            |
| Introduction to Art             | 2                                 | 0                    | 2            |
| History & Appreciation of Music | 2                                 | 0                    | 2            |
| Health Education                | 2                                 | 0                    | 2            |

#### *Future Development*

Additional classes will be scheduled for the Forum in future years. Consideration is now being given to the following

#### *Superior Teaching*

It is contended that large class instruction leads to superior teaching because teachers must be better prepared, the instructional program is enriched by using many visual aids, and teacher cooperation results in a high level of instruction.

It should also be recognized that teachers vary in their specific competencies. Some are much better qualified as lecturers; others are more adept at leading discussion. The large class experiment makes

\* 14-15 classroom hours per week is a full teacher's load.



courses: Principles of Economics, History of Western Civilization, General Life Science, Physical Science and Introductory Chemistry.

It is anticipated that a second large lecture hall will need to be constructed. The present Forum was so designed that another large lecture-demonstration hall may be constructed utilizing the same backstage area.

Large class instruction in the Forum is one answer Orange Coast College gives to the question: "How can we best provide for an expanded enrollment and yet provide quality instruction?" The college is convinced that the program will bring large dividends as teacher shortage becomes more acute.

# A Comparison of Selected Pre-Teaching Competencies of Transfer and Non-Transfer Students

BRYANT J. CRATTY

MOST OF THE investigations involving a comparison of the abilities of the transfer student to those of the nontransfer student in four-year institutions are concerned only with grade point averages. However, most individuals interested in teacher preparation point to other factors which they also consider to be important attributes of those entering the teaching profession. Such factors as good character, effective personality, good appearance, the ability to communicate orally and in writing, and good interpersonal relations are also felt to be involved in later success as a teacher. In addition, good teaching in most subject matter areas involves a knowledge of specific skills applicable to the discipline under consideration.

The study which was recently undertaken at the University of California at Los Angeles involved a comparison of grade point averages, scores in a motor ability test, as well as a comparison of instructors' ratings on 13 qualities which were deemed important in the effective performance of future teachers of physical education. The evaluation tools utilized

could perhaps be studied in order to ascertain their reliability and validity. In the case of the motor-ability test (The Navy "W" Run), the reliability coefficient was found to be  $+0.706$ , while the instructor's ratings were negatively skewed toward high ratings of 7, 8, and 9, on a 10 point scale.

There were no statistically significant differences in the mean scores between the two groups of students (Table I). This is based upon a comparative test which is sensitive to the differences in the mean scores, the variances, and/or the skewness of the scores of the two groups studied.

There was a moderately significant correlation between seven items on the Instructor's Rating Form. It was felt that this matrix of intercorrelations indicated that the instructors were assessing a general quality termed *Character and Potential* (Table II).

The instructors' ratings of their students' *Knowledges and Understandings* were moderately related to ratings of *Oral and Written Communication* ( $+0.653$  and  $+0.753$ ). However, it is interesting to note that ratings of *Knowledges and Understandings* had no significant relationship to the students' actual grade point averages ( $+0.313$ ).

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Author of a number of articles on physical education, BRYANT J. CRATTY is a junior supervisor of physical education at the University of California, Los Angeles.

TABLE I  
*A Comparison of the Mean Scores*

| Item                                  | Mean<br>Score<br>Non-Transfer | Mean<br>Score<br>Transfer | Diff. | K S    | X <sup>2</sup> | Confidence<br>Level |
|---------------------------------------|-------------------------------|---------------------------|-------|--------|----------------|---------------------|
| (1-13 based on 10 point scale)        |                               |                           |       |        |                |                     |
| 1. Appearance                         | 6.90                          | 6.87                      | .03   | - 6.88 | .086           | .90                 |
| 2. Written Communication              | 6.25                          | 5.70                      | .55   | +20.9  | 2.556          | .30                 |
| 3. Oral Communication                 | 6.14                          | 5.88                      | .35   | +19.31 | 2.25           | .40                 |
| 4. Voice                              | 6.50                          | 6.19                      | .31   | +21.54 | 2.68           | .30                 |
| 5. Health-Stamina                     | 6.81                          | 7.53                      | .72   | -29.92 | 5.38           | .10                 |
| 6. Interpersonal Relations            | 5.90                          | 6.55                      | .65   | -15.94 | 1.48           | .50                 |
| 7. Sense of Responsibility            | 6.48                          | 6.36                      | .12   | +10.33 | .642           | .80                 |
| 8. Direction and Initiative           | 6.10                          | 6.22                      | .12   | -11.76 | .823           | .70                 |
| 9. Aspiration Level                   | 6.55                          | 6.47                      | .08   | -16.86 | 1.63           | .50                 |
| 10. Growth Potential                  | 6.40                          | 6.42                      | .22   | -15.17 | 1.43           | .50                 |
| 11. Knowledges and Understandings     | 6.55                          | 6.22                      | .33   | +23.33 | 3.178          | .30                 |
| 12. Prognosis of Professional Success | 6.42                          | 6.64                      | .22   | -11.32 | .716           | .70                 |
| 13. Movement Skills                   | 7.26                          | 7.02                      | .24   | +14.96 | 1.23           | .60                 |
| 14. Grade Point Average               | 5.22                          | 4.83                      | .50   | +16.40 | 1.627          | .50                 |
| (Decile Ranking of 4.0 Scale)         |                               |                           |       |        |                |                     |
| 15. Speed Agility Score               | 6.50                          | 5.38                      | 1.13  | +35.71 | 3.809          | .20                 |
| (Decile Ranking)                      |                               |                           |       |        |                |                     |

TABLE II  
*Intercorrelations of Ratings Indicating Character and Potential*

|                                      | 7     | 6     | 5     | 4     | 3     | 2     | 1     |
|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|
| 1. Interpersonal Relations           | .751  | .678  | .632  | .637  | .500  | .673  | 1.000 |
| 2. Sense of Responsibility           | .629  | .581  | .628  | .805  | .741  | 1.000 |       |
| 3. Direction and Initiative          | .475  | .452  | .736  | .764  | 1.000 |       |       |
| 4. Aspiration Level                  | .619  | .607  | .611  | 1.000 |       |       |       |
| 5. Growth Potential                  | .645  | .584  | 1.000 |       |       |       |       |
| 6. Knowledges and Understandings     | .579  | 1.000 |       |       |       |       |       |
| 7. Prognosis of Professional Success | 1.000 |       |       |       |       |       |       |

There was no significant relationship between the scores on the motor ability test and the instructor's ratings of *Movement Skills*. (Table III). Significant multiple correlations were found in several instances (Table IV), the most significant occurring between the ratings of *Interpersonal Relations* and the ratings of

*Health Stamina*, and *Knowledges and Understandings* (.921).

#### CONCLUSIONS AND RECOMMENDATIONS

It was concluded that, based upon highly empirical data, there were no significant differences between the non-transfer students and the transfer students

TABLE III  
Intercorrelation Coefficients

| Item                                  | 15    | 14    | 13     | 12    | 11    | 10    | 9     | 8     | 7     | 6     | 5     | 4     | 3     | 2     | 1     |
|---------------------------------------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1. Appearance                         | .261  | .124  | .258   | .290  | .343  | .154  | .282  | .237  | .245  | .370  | .324  | .224  | .606  | .505  | 1.000 |
| 2. Written Communication              | .189  | .294  | .104   | .538  | .735  | .483  | .553  | .415  | .505  | .570  | .302  | .328  | .772  | 1.000 |       |
| 3. Oral Communication                 | .326  | .299  | .201   | .457  | .653  | .426  | .526  | .467  | .458  | .550  | .379  | .439  | 1.000 |       |       |
| 4. Voice                              | .245  | .161  | .591   | .611  | .323  | .656  | .298  | .572  | .404  | .463  | .439  | 1.000 |       |       |       |
| 5. Health Stamina                     | .057  | .050  | .536   | .490  | .262  | .428  | .387  | .426  | .464  | .625  | 1.000 |       |       |       |       |
| 6. Interpersonal Relationships        | .076  | .108  | .356   | .751  | .678  | .632  | .636  | .500  | .673  | 1.000 |       |       |       |       |       |
| 7. Sense of Responsibility            | .226  | .402  | .211   | .629  | .581  | .629  | .805  | .742  | 1.000 |       |       |       |       |       |       |
| 8. Direction and Initiative           | .145  | .344  | .375   | .474  | .452  | .736  | .765  | 1.000 |       |       |       |       |       |       |       |
| 9. Aspiration Level                   | .079  | .388  | .168   | .620  | .607  | .611  | 1.000 |       |       |       |       |       |       |       |       |
| 10. Growth Potential                  | .107  | .188  | .524   | .646  | .548  | 1.000 |       |       |       |       |       |       |       |       |       |
| 11. Knowledges and Understandings     | .193  | .313  | .071   | .579  | 1.000 |       |       |       |       |       |       |       |       |       |       |
| 12. Prognosis of Professional Success | .062  | .208  | .465   | 1.000 |       |       |       |       |       |       |       |       |       |       |       |
| 13. Movement Skills                   | .119  | -.160 | *1.000 |       |       |       |       |       |       |       |       |       |       |       |       |
| 14. Grade Point Average               | .016  | 1.000 |        |       |       |       |       |       |       |       |       |       |       |       |       |
| 15. Motor Skills Test                 | 1.000 |       |        |       |       |       |       |       |       |       |       |       |       |       |       |

\* (All correlations are positive, except between Grade Point Average and the Rating of Movement Skills—.160.)

TABLE IV  
*Multiple Correlation Coefficients*

| <i>Independent Variables</i>                              | <i>Multiple r</i> | <i>Dependent Variable</i>         |
|---|-------------------|-----------------------------------|
| 1. Written Communication<br>Knowledges and Understandings | .735              | Prognosis of Professional Success |
| 2. Written Communication<br>Oral Communication            | .771              | Knowledges and Understandings     |
| 3. Appearance<br>Growth Potential                         | .771              | Prognosis of Professional Success |
| 4. Interpersonal Relations<br>Voice                       | .816              | Prognosis of Professional Success |
| 5. Aspiration Level<br>Direction and Initiative           | .843              | Sense of Responsibility           |
| 6. Health and Stamina<br>Knowledges and Understandings    | .921              | Interpersonal Relations           |

in the men's physical education major program at the University of California at Los Angeles. It was recommended that additional study be undertaken to develop more effective evaluative tools and that a complete battery of motor skills tests be considered for adoption. In addition, it was also advanced that comparative studies of students in many different sub-

ject matter areas could be undertaken utilizing the general approach involved in this investigation. Not only should grade-point averages be taken into consideration but also ratings of instructors and specific competencies when comparing the junior college transfers to students beginning their educational careers at the four-year institutions.

## Political Activity of Teachers

STUART E. MARSEE

IT IS IMPORTANT that a teacher, just as any other citizen, recognize and exercise his responsibilities to study political issues and the proposals and records of candidates, to express opinions on political issues outside the classroom, to vote, and, if he desires, to serve as a candidate for public office. Obviously, the teacher in public schools should not use his classroom with its captive audience as a forum to advocate partisan political beliefs. Acceptance of this position, however, does not in itself assure the teacher that he has been given adequate guidelines regarding the time and place for the use of his freedom as well as the extent to which he may participate in political activity.

One phase of the problem resolves itself regarding the extent to which school district pupils, employees and district officers may participate in tax, bond and school board elections which would affect the schools. Having been asked this question a sufficient number of times, the Office of Los Angeles County Counsel, under the direction of Harold W. Kennedy, County Counsel, on April 20, 1959, prepared and distributed to all governing boards in Los Angeles County a lengthy memorandum which, as he stated "... attempts to clarify the legal principles involved and to give specific examples of

what may and may not be done in respect to participation in school district elections." Obviously the opinions contained therein relate to California law.

Probably most pertinent to the immediate subject is Mr. Kennedy's opinion, which is not intended to be exhaustive, that the following may be cited as specific instances of the types of activities in which school district officers and employees may engage in connection with a school election:

1. School district officers and employees may make speeches or otherwise urge persons to vote for or against a school proposition during off-duty hours for which they are not being paid from school district funds.

2. P.T.A. groups, local Chambers of Commerce and other groups of citizens may obtain from the school district all the facts gathered by the district pertaining to the issues of the election and may, expending their own funds and using their own facilities, actively campaign for or against the school proposition.

3. School facilities may be used under the Civic Center Act for meetings having for their purpose the influencing of voters with respect to an election, whether or not it be a school election.

As a point of clarification it might be mentioned at this point that in California law under the Civic Center Act the board of a school district may grant the use of school buildings or grounds for public, scientific, literary, recreational, or educational meetings, or for the discussion of matters of public or general interest, upon

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STUART E. MARSEE is President and District Superintendent of the El Camino Junior College District, El Camino, California.



conditions which the board deems proper and subject to relatively liberal requirements, restrictions or limitations of the Education Code. A second aspect of the problem relates to the local board of trustees' policy in regard to teachers' participation in political activities. Generally, boards of trustees have power to be more restrictive at the local level if they so desire. It would seem almost imperative that teachers should know, and that the board should wish to define, its policy on this important aspect of citizenship.

The Pasadena Board of Education, during the writer's tenure as Acting Superintendent and Assistant Superintendent in 1957, developed and adopted a policy concerning political activities. More recently the Trustees of the El Camino Junior College District, after making minor revisions of the Pasadena Policy, adopted the following policy regarding political activity:

#### EL CAMINO COLLEGE POLICY ON POLITICAL ACTIVITIES

The Board of Trustees recognizes and encourages the right of its employees, as citizens, to engage in political activity on their own time. However, the Board of Trustees also recognizes that school property and school time, paid for by all of the people, shall not be used for political purposes except as provided under the Civic Center Act. It therefore enacts the following rules in regard to political activity:

1. No employee shall engage in any political activities upon property under the jurisdiction of the El Camino Junior College District Board of Trustees. "Property," as used herein, includes school premises, property owned by the El Camino Junior College District, and property in the possession of the El Camino Junior College District, whether the possession be through lease or otherwise. However, outside the on-duty

hours employees have the same right as all other persons to participate in political activities permitted under the Civic Center Act.

2. Except as permitted under the Civic Center Act, the following activities upon property under the jurisdiction of El Camino Junior College District Board of Trustees are specifically prohibited:
  - a. Posting of political circulars or petitions on bulletin boards.
  - b. The distribution, to employees, whether by placing in their school mailboxes, or otherwise, of political circulars or petitions, United States mail being excepted.
  - c. The collection of and/or solicitation for campaign funds.
  - d. Solicitation for campaign workers.
  - e. The use of pupils for writing or addressing political materials, or the distribution of such materials to pupils.
3. The term "political" as used in these rules includes, without being limited to, all public elections of any kind or character whatever, school district, city, county, state or national, and the term "activity" includes any participation in political campaigns or other activity.
4. Employees shall obey any and all applicable Sections of the Education Code, the Administrative Code, and any other applicable statutes. In the event of any conflict between these rules and said Codes and statutes, the Codes and statutes shall prevail.
5. Violation of any of the foregoing rules shall, at the discretion of the El Camino Junior College Board of Trustees, constitute cause for reprimand, demotion, suspension, discharge or dismissal.
6. Nothing in these rules shall prevent:
  - a. The dissemination of information concerning school tax and/or bond elections by the administrative staff insofar as authorized by the Education Code.
  - b. The discussion and study of politics and political issues, when such discussion and study is appropriate to classroom studies, such as history, current events, and political science.

- c. The conducting of student and employee elections, and campaigning connected therewith.

Everyone knows there is no substitute for good judgment; yet it is reasonable to expect that if a person knows the ground

rules he is less likely to be "caught off base." Many unpleasant experiences can be avoided during the heat of election campaigns if a reasonable and clear policy has been adopted by the board of trustees.

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### **This I Tried and Found Helpful**

#### **Teaching by Magnetic Tape**

Harry R. Wilson, Lansing Community College, Lansing, Michigan

If the training and education of technicians is to be commensurate with modern technological advancement, new methods of instruction must be found. Textbooks and laboratory manuals written for today's classes are not yet available. For the preparation of lecture-discussion periods, research of current technical magazines and periodicals is imperative. Extracts from articles may be taped by the instructor and used in the classrooms to supplement other instructional materials. To illustrate these tape lectures, circuits and diagrams are previously prepared, multigraphed, or thrown on a screen using the opaque projector. Some of the advantages gained by this method are as follows:

1. The tape may be prepared at leisure with far less effort than a written preparation, and it may be edited and erased with comparative ease.

2. Emphasis may be placed on important materials by repetition. The instructor may stop the tape at any time to supplement it or present the material in a different form.

3. Lectures may be repeated to parallel classes thus insuring that each group is presented with the same material.

4. During an instructor's absence such taped and illustrated lectures may be presented by a member of the student group or a supervising staff member.

Space prevents a description of other advantages. It will be found, however, that tape-prepared lectures, supplemented and clarified by the instructors remarks, enlivened by student discussion, and illustrated by multigraphed or projected illustrations, are a modern method of teaching worthy of consideration.

# The Future of the Junior College in Business Administration

WALTER NARDELLI

IN FIVE YEARS the junior college catalog will be obsolete. In fact, the catalog of the four-year college will need vast changes concerning educational concepts and programs of study to analyze and explain the dynamic European and Asiatic economic renaissance.

Common to most junior colleges for discussion purposes are courses such as Business Statistics, Marketing Research, Advertising Procedures and Problems, Budgeting, Advanced Accounting, Auditing, Cost Accounting (Managerial and Industrial), Sales Management and Problems. All of these subjects must have prerequisites in terms of introductory courses. The essence of these courses deals with problems in contrast to the principles of elementary courses. Since these courses are basically the formulation, analysis, and probable effective solution to these problem situations, they require a higher degree of concentration, judgment, evaluation, synthesis and analysis of research work than the present junior college student has. These problem-centered courses require:

1. A student who has an intelligence aptitude above average.

2. The development of attitudes and logical approaches—such as the idea that a basic principle may be a *constant* element across many specialized courses, such as a principle being understood and applied after extensive concentration and study.

The junior college catalog will become obsolete in a few years because data processing will be a catalyst that will cut across the entire business administration program and eliminate the drawn-out traditional methods of slow human endeavor in the analysis and solution of industrial, scientific, and business problems. Data processing and digital computers will eliminate in part the repetitious nature of subject matter found in courses such as Marketing Research, Sales Management, Business Statistics, etc. Yet the immediate effect of data processing at the junior college level will be that in these subject areas the four-year college will have no vocational advantage over the two-year college.

Data processing application to business administration programs of study will change the entire nature and concept of the function of the junior college in American education. The "ivy-league" colleges are mostly enmeshed in traditional curriculum patterns, faculty organization, and building requirements, but the junior college has not yet encumbered itself with strangling "ivy-league" con-

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WALTER NARDELLI is the Dean of Champlain College in Burlington, Vermont. Formerly he was Dean of Business Administration, Burdett College, Boston, Massachusetts.

cepts. It is still a pilot agent in experimentation and exploration in attempting to determine the kind of education needed for the large number of students who will wish to attend higher educational institutions in the next few years.

New concepts of organization and breakdown of business administration subject matter must be developed to utilize to a maximum degree the demands of data processing. The difference in thinking lies in the functional approach to subject matter classification and learning. With data processing, subject matter must be applied in a predetermined manner to a machine for preplanned results or output. In many instances the output then is applied to or explains the business problem situation. The life situation in business and the data processed material are one and the same. For example, if an accounting machine (data processing machine) is to give a profit and loss statement or a break-even point in managerial cost accounting, the input data for the machine must come from the real business situation and must reflect the actual situation. Therefore, the output from such prepared data will reveal a facet of an answer to that particular business problem. Experiments are being made by electronic companies to eliminate the "original books" of businesses so that the transition from original memoranda to machine language is almost the same process.

To teach theory of accounting, for example, as it is being taught now in a methodical progression of accumulation of knowledge, defeats the purpose and function of data processing machines. A student needs the concepts of debit and credit schedule, financial statements, cost variances, etc. to work with data process-

ing machines. If he is bogged down by the "doing approach" to accounting, he is then not being prepared for the era of data processing machines when these machines will be small enough and sufficiently inexpensive to be used by the average business firm. A concept approach to studying subject matter necessitates the need of a student with imagination, initiative, physical fortitude, and great intellectual capacity. The data processing program will also act as a selective agent for student performance and production.

Isn't the administrator's function fulfilled painlessly if the requisites of theory concept education in business administration subjects eliminate the student who cannot project himself into a realm of constant elements that are found in any phase of accounting, whether it is in cost, consolidation statements, or budgeting? If a student realizes his own limitations, then the traditional pattern of teaching accounting through the demonstration method, the workshop method, and lecture method would prove valuable, but at the same time the potentiality of each student will have been tapped, aroused, and used to the degree of his natural endowments.

This new concept of arranging programs of studies will elevate the work of the junior college to the level of the four-year college. The traditional degree-granting college (business administration) will have no vocational advantages over the two-year institution. The efficacy of the four-year college perhaps lies in the time element utilized in the liberal arts area. Yet, modern economy is proving that a giant like the United States is being equalled and in many cases sur-

passed by smaller entities of foreign countries. The deciding factor in American industry is the enormous influence of American "know-how" transplanted with American capital in Italy, France, England, Canada, and West Germany. The momentum of present economic thinking has begun to destroy language, geographical, and ethnic barriers. The creed of the businessman is the same in any part of the world. As American ingenuity in machine automation has been transplanted to foreign countries, the impact upon American economy as a levelling force is being strenuously felt. Thus, the similarity between the problems of American economy and the junior college suggests that a certain tangible element may be an equalizing factor in the long run in spite of the corporeal greatness of the present four-year colleges.

The flexibility of the junior college program is conducive to change, experimen-

tation, and originality. The junior college is capable of producing students with ability comparable to those in a four-year college because of a new concept of educational learning in conjunction with the efficacy and potentiality of data processing machines.

What value is the degree of the four-year college (business administration) if the junior college believes that the traditional pattern of education is obsolete with regard to an understanding and analysis of the present maelstrom of American economy? Will the degree in business administration have the same value in a few years if the industrial and commercial segments of American life are better interpreted and understood through intensive research and programs of study of the future junior college that has adopted a new concept of course subject classification in relation to data processing advantage?

# Difference in Average Salaries of Junior College and Four-Year College and University Faculties

LOUIS A. D'AMICO

SALARIES PAID to faculty personnel in 1,018 four-year colleges and universities and 415 junior colleges were listed in *Higher Education Planning and Management Data, 1959-60*,<sup>1</sup> a publication distributed to institutions of higher education by the U.S. Office of Education. The primary purpose of *HEP & M* is to provide normative data useful in budget-making and other planning activities to college and university administrators and others interested in the status of higher education. Since the distribution of *HEP & M, 1959-60*, was somewhat limited, it was felt that an analysis of 1959-60 junior college and four-year college and university salaries would be of particular interest to faculty personnel.

This report compares the average 1959-60 salaries of faculty personnel in 415 junior colleges with the average 1959-60 salaries of faculty in 1,018 four-year colleges and universities. Salaries of faculty in professional schools are not included. The salary data in *HEP & M, 1959-60*, are analyzed as follows: (1) a comparison between average 9-10 and

11-12 month salaries of faculty in junior college and all faculty ranks in four-year colleges and universities; (2) a comparison of average 9-10 and 11-12 month salaries of faculty personnel in four-year colleges and universities by rank; (3) a comparison of the average 9-10 and 11-12 month salaries of junior college faculty to the average of each faculty rank in four-year colleges and universities. Each of the three comparisons listed above is made by institutional size and by institutional control.

Since enrollments for junior colleges do not extend beyond the 2,500 and over category, enrollment data for four-year colleges and universities were, for comparative purposes, restricted in size to include categories corresponding to those of junior colleges. This means that although 405 junior colleges in the 2,500 and over category fall in the 2,500-4,999 enrollment category, 10 junior colleges have enrollments of over 5,000 students. This limitation applies to public junior colleges only. In all, salary data were received from 271 public and 144 private junior colleges and 312 public and 706 private four-year colleges and universities.

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LOUIS A. D'AMICO is a Specialist, College Business Management, Office of Education, Department of Health, Education, and Welfare, Washington, D.C. Formerly he held the position of Assistant Director of Student Affairs at Flint Junior College.

<sup>1</sup> W. Robert Bokelman, *Higher Educational Planning and Management Data, 1959-60*, OE-53004, Circular No. 614, Department of Health, Education, and Welfare, 1960.



COMPARISON OF AVERAGE SALARIES OF  
FACULTY IN JUNIOR COLLEGES AND FOUR-  
YEAR COLLEGES AND UNIVERSITIES—  
ALL RANKS

As can be seen in Table 1, the average 9-10 month salary of faculty personnel in public junior colleges was \$6,550, exceeding the average of public four-year institutions by \$120. In private junior colleges, on the other hand, the average 9-10 month salary was \$4,420, or \$1,180 less than the average paid by private four-year institutions. The average 11-12 month salary in public junior colleges was \$7,130, or \$80 less than the average of public four-year institutions. In private junior colleges, the average 11-12 month salary was \$5,230, or \$1,430 less than the average paid by private four-year institutions.

With the exception of public junior colleges and four-year institutions with enrollments of 500-999, the average 9-10 and 11-12 month salaries paid to faculty personnel increased with the size of the institution. The range in average 9-10

month faculty salaries in public junior colleges was from \$5,430 for institutions with less than 500 students to \$7,350 for those with 2,500 students and over; the range for private junior colleges is restricted by the fact that data were available for only two enrollment categories. The average 9-10 month faculty salaries in public four-year colleges and universities ranged from \$5,910 for institutions with 500-999 students to \$6,540 for institutions with 2,500-4,999 students; the range for private four-year colleges and universities is restricted to the two smaller enrollment categories used for comparative purposes.

As was found for 9-10 month average salaries, the average 11-12 month salaries paid to faculty personnel, with the exception of public junior colleges with 500-999 students, increased with the size of the institution. The average 11-12 month salaries in public junior colleges ranged from \$5,580 for those with 500-999 students to \$8,150 for those with 2,500 students and over; in private junior col-

Table 1. Comparison of Average 9-10 and 11-12 Month Salaries of Junior College Faculty and All Ranks of 4-year College and University Faculty by Institutional Size\*, and by Institutional Control

| Enrollments    | Public Institutions |          |                                  |          | Private Institutions |          |                                  |          |
|----------------|---------------------|----------|----------------------------------|----------|----------------------|----------|----------------------------------|----------|
|                | Junior Colleges     |          | 4-year Colleges and Universities |          | Junior Colleges      |          | 4-year Colleges and Universities |          |
|                | Number              | X Salary | Number                           | X Salary | Number               | X Salary | Number                           | X Salary |
| 9-10 Months    |                     |          |                                  |          |                      |          |                                  |          |
| Below 500      | 1807                | \$5430   | 282                              | \$6210   | 1515                 | \$4350   | 2751                             | \$5140   |
| 500-999        | 1226                | 5960     | 1560                             | 5910     | 282                  | 4770     | 5350                             | 5830     |
| 1,000-2,499    | 2261                | 6390     | 6028                             | 6410     | --                   | --       | --                               | --       |
| 2,500 and over | 3337                | 7350     | 8623                             | 6540     | --                   | --       | --                               | --       |
| Total          | 8631                | 6550     | 16493                            | \$6430   | 1797                 | \$4420   | 8101                             | \$5600   |
| 11-12 Months   |                     |          |                                  |          |                      |          |                                  |          |
| Below 500      | 255                 | \$6000   | 75                               | \$6510   | 209                  | \$4960   | 319                              | \$5330   |
| 500-999        | 188                 | 5580     | 216                              | 6980     | 63                   | 5150     | 917                              | 5990     |
| 1,000-2,499    | 476                 | 7410     | 1290                             | 6750     | 77                   | 6020     | 1932                             | 7190     |
| 2,500 and over | 444                 | 8150     | 2564                             | 7480     | --                   | --       | --                               | --       |
| Total          | 1363                | \$7130   | 4145                             | \$7210   | 349                  | \$5230   | 3168                             | \$6660   |

\* Enrollments for 4-year institutions are restricted to 2,500-4,999. Only 10 of 415 junior colleges had enrollments over 4,999.

leges, the average 11-12 month salaries varied from \$4,960 for those with less than 500 students to \$6,020 for those with 1,000-2,499 students. The average 11-12 month salaries in public four-year colleges and universities varied from \$6,510 for institutions with less than 500 students to \$7,480 for institutions with 2,500-4,999 students; in private junior colleges, the range was from \$5,330 for institutions with less than 500 students to \$7,190 for institutions with 1,000-2,499 students.

COMPARISON OF AVERAGE SALARIES BY  
RANK—FOUR-YEAR COLLEGES AND  
UNIVERSITIES

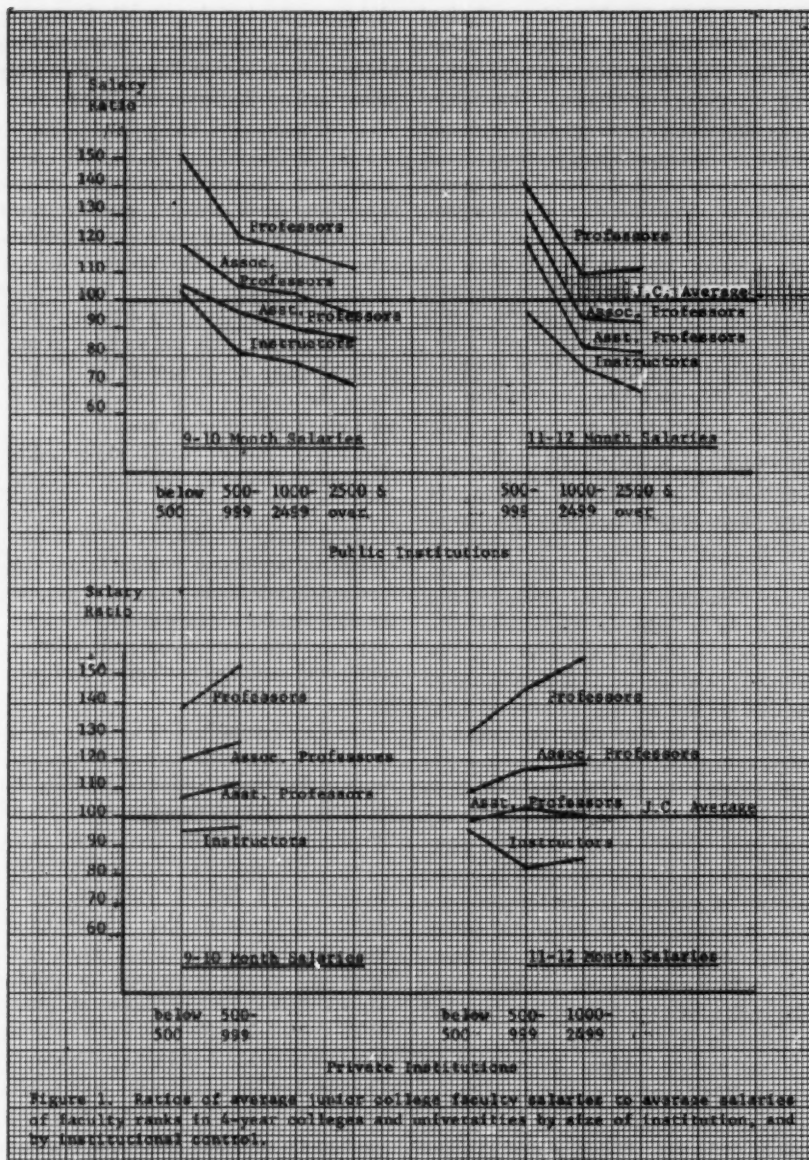
As can be seen in Table 2, the average 9-10 month salaries of professors in private institutions were higher than the average of professors in public institutions in two of the four enrollment categories used for comparison. The average salaries of all the ranks below professor, however, were higher in public institutions in nearly all four enrollment categories, associate professors in institutions with 5,000-9,999

students excepted. The largest difference in average salary rank was between the average salaries of professors and associate professors. This difference increased with enrollment category size for both public (institutions below 500 excepted) and private institutions. The difference between the average salaries of associate professors, assistant professors, and instructors was considerably smaller than the difference in salaries between professors and associate professors.

For two of four enrollment categories the average 11-12 month salaries of professors in private institutions were higher than those of professors in public institutions of the same size. With minor fluctuations, the average 11-12 month salaries of associate professors, assistant professors, and instructors in public institutions were higher than those in private institutions. The difference in the average salary by faculty rank was largest between professors and associate professors, this difference being considerably larger for those on an 11-12 month salary basis. As was

Table 2. Number and Average 9-10 and 11-12 month Salaries by Rank, by Size of Institution, and by Institutional Control

| Size of Institution | Faculty Rank | Public      |            |              |            | Private     |            |              |            |
|---------------------|--------------|-------------|------------|--------------|------------|-------------|------------|--------------|------------|
|                     |              | 9-10 months |            | 11-12 months |            | 9-10 months |            | 11-12 months |            |
|                     |              | Number      | \$ Average | Number       | \$ Average | Number      | \$ Average | Number       | \$ Average |
| Below 500           | Professor    | 33          | \$8260     | --           | --         | 541         | \$6000     | 76           | \$6470     |
|                     | Associate    | 42          | 6490       | --           | --         | 358         | 5210       | 65           | 5410       |
|                     | Assistant    | 64          | 5770       | --           | --         | 694         | 4660       | 62           | 4910       |
|                     | Instructor   | 90          | 5620       | --           | --         | 451         | 4180       | 101          | 4750       |
| 500-999             | Professor    | 267         | \$7270     | 56           | \$7840     | 1361        | \$7270     | 286          | \$7510     |
|                     | Associate    | 332         | 6250       | 46           | 7370       | 1236        | 5990       | 231          | 6020       |
|                     | Assistant    | 556         | 5700       | 52           | 6730       | 1560        | 5320       | 245          | 5280       |
|                     | Instructor   | 365         | 4900       | 30           | 5440       | 1063        | 4650       | 146          | 4300       |
| 1,000-2,499         | Professor    | 1250        | \$7830     | 319          | \$8140     | 1976        | \$7910     | 585          | \$9400     |
|                     | Associate    | 1532        | 6790       | 298          | 6990       | 1685        | 6440       | 448          | 7190       |
|                     | Assistant    | 2129        | 5940       | 409          | 6220       | 2253        | 5600       | 541          | 6050       |
|                     | Instructor   | 1117        | 5160       | 264          | 5650       | 1549        | 4780       | 355          | 5150       |
| 2,500-4,999         | Professor    | 1767        | \$8230     | 751          | \$9130     | 599         | \$8800     | 202          | \$9520     |
|                     | Associate    | 2070        | 6970       | 654          | 7580       | 565         | 6700       | 228          | 7420       |
|                     | Assistant    | 2981        | 6100       | 783          | 6720       | 811         | 5730       | 251          | 6920       |
|                     | Instructor   | 1805        | 5170       | 375          | 5610       | 502         | 4800       | 127          | 5330       |



found for 9-10 month average salaries, and even to a higher degree, the difference between the two ranks was larger with increasing enrollments. The differences between the average salaries of associate professors, assistant professors, and instructors on an 11-12 month basis were considerably less than those between professors and associate professors.

RATIO OF AVERAGE JUNIOR COLLEGE FACULTY SALARY TO AVERAGE OF PROFESSORS, ASSOCIATE PROFESSORS, ASSISTANT PROFESSORS AND INSTRUCTORS IN FOUR-YEAR COLLEGES AND UNIVERSITIES

To show the relationship between average salaries of junior college faculty personnel and faculty personnel in four-year institutions, the average of the salaries of faculty in junior colleges was divided by the average of salaries paid professors, associate professors, assistant professors, and instructors in four-year institutions, and the quotient was multiplied by 100. The resulting product, then, is a measure of the size of the average salaries of each faculty rank in four-year institutions in relation to average salaries of junior college faculty. It denotes the extent to which the average salaries of each faculty rank are larger or smaller than the average salaries of faculty personnel in junior colleges by size and by institutional control. To avoid a repetition of the junior college average faculty salary, the four-year college and university average faculty rank salaries ratio is abbreviated and is called the JC-CU salary ratio.

It can be seen in Figure 1 that the 9-10 month JC-CU salary ratios in public institutions decreased with the increase in institutional size. Public junior colleges with less than 500 students paid their fac-

ulty personnel less than public four-year institutions of the same size. However, the average 9-10 month salaries of public junior college faculty were larger than those for instructors and assistant professors in institutions with 500-999 and 1,000-2,499 students, and were larger than those for instructors, assistant professors, and associate professors in institutions with 2,500-4,999 students. The average 9-10 month salaries of full professors, although subject to a decline in JC-CU salary ratios with the increase in size of enrollments, maintained a JC-CU ratio above the junior college base in each of the four enrollment categories.

The 9-10 month JC-CU salary ratios in private institutions, although restricted to two enrollment categories, increased with the size of enrollments. With the exception of instructors, private junior colleges paid their faculty personnel proportionately smaller average salaries than private four-year institutions paid assistant professors, associate professors, and professors.

The 11-12 month JC-CU salary ratios of public institutions were similar to the ratios of 9-10 month salaries in public institutions. Although ratios were computed for three of the four enrollment categories, public junior college faculty in institutions with 500-999 students had a higher average salary than instructors in four-year institutions of the same size. However, faculty personnel in public junior colleges with enrollments of 1,000-2,499 received higher average salaries than instructors and assistant professors in four-year institutions that size, and public junior college faculty in institutions with enrollments of 2,500 and over received higher average salaries than instructors,

assistant professors and associate professors in four-year institutions with enrollments of 2,500-4,999.

The 11-12 month JC-CU salary ratios of private institutions were somewhat different from those found for 9-10 month salaries of private institutions. Whereas the ratios increased in size for professors and associate professors, for assistant professors the ratio increased between institutions with less than 500 students and those with 500-999 students, and between

institutions with 500-999 and 1,000-2,499 students, the ratio decreased. It appears that junior college faculty on an 11-12 month basis received average salaries that approximate the average salaries of assistant professors in four-year institutions. The JC-CU 11-12 month salary ratios for instructors in private institutions decreased between institutions with less than 500 and 500-999 students but increased between institutions with 500-999 to 1,000-2,499 students.



## Junior College Engineering Programs

FREDERICK R. HENDERSON

AN ARTICLE in the September, 1959, issue of the *Junior College Journal* entitled, "A Local Problem for Engineering Education," by Lillie and Stockwell raised an issue that is nationwide rather than local in scope. What is a technician and what education or training should he receive? In some quarters an effort has been made to distinguish between the "industrial technician" and the "engineering technician"; in other areas the use of the term "technologist" to describe the higher level technician is gaining some acceptance. Regardless of what he is called, however, the problem is to determine how and to what extent his training differs from that of the skilled craftsman on the one hand and the professional engineer on the other.

Informal discussions with a number of junior college engineering teachers attending a National Science Foundation Summer Institute at Monterey Peninsula College revealed a wide divergence concerning the nature and scope of the engineering and technology programs offered by the schools represented at the Institute. This, of course, merely confirmed the findings of a recent ASEE National Sur-

vey of Technical Institute Education. It seems desirable, therefore, to review certain aspects of engineering education in general before considering the junior college problem in particular.

The rapid development of science, engineering, and technology in recent years has resulted in an expansion of the old engineer-craftsman team to include scientists and technicians or technologists as well as engineers and craftsmen. It is this new group of technicians or technologists that will be considered here. Are they very highly skilled craftsmen, or are they sub-professional engineers? Is their training essentially vocational or semi-professional in scope and content?

The final answer to the question of the status of the engineering technician or technologist lies in the future, but the history of the engineering profession during the past 50 years affords a clue to the probable trend in the years ahead. The development by the national professional engineering societies of engineering codes of ethics together with the registration of professional engineers which is now mandatory in all the states has brought general recognition of engineering as a profession. It has been accompanied by a broadening of the engineering school curriculum to include more of the humanities at the expense of the mechanic arts.

The trend in professional engineering education today is clearly toward an

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FREDERICK R. HENDERSON is Associate Professor, College of Applied Science, Rochester Institute of Technology, New York. From 1958-60 he served as Head of the Engineering Department at Northeastern Junior College, Sterling, Colorado.



increased emphasis on "science" at the expense of "art," and the technician or technologist is taking over many of the functions formerly performed by engineers, particularly in the areas of construction, operation, and sales. It is the writer's conviction that this trend will continue and will necessitate a substantial broadening of the present highly specialized technical institute type of training. Furthermore, as the percentage of the population attending college increases, the social and economic advantages of a baccalaureate degree will militate against any "terminal" program which does not provide opportunity for continued study toward a degree without undue loss of time for students who possess the necessary ability and ambition.

Trends in this direction are already discernible. Several leading technical institutes have in recent years expanded their programs to provide additional work leading to a bachelor's degree. A number of large industrial firms have inaugurated technologist training programs similar to their engineer training programs, and they are encouraging their technologists to seek baccalaureate degrees through part-time study. The National Society of Professional Engineers has investigated the possibility of offering some type of licensing or registration for technicians and technologists. These facts point significantly toward semi-professional or, in time, full professional status for the engineering technologist of the future.

At the same time one must be aware of the development of area vocational programs to train technicians at the post-high school level and take account of the impetus to these programs provided by Public Law 846 (Title VIII). These are by

definition terminal programs and are a logical development in the field of vocational education. Many of these programs are comparable to some offered at present by accredited technical institutes. They are, however, vocational rather than professional in scope and content. How, then, can one distinguish between these programs? And, in guidance programs, how can students who are interested in this field be properly counseled?

At present there is no generally accepted definition of a technologist as distinguished from a technician, but for the purpose of this article, the writer proposes the following distinction. The technologist has innate ability substantially equal to that of the engineer; while he is able to master the calculus, his interest is in technology rather than science. For example, he is concerned with the operation of a digital computer rather than in its initial design. The technician, on the other hand, has less native ability; he finds the calculus rather beyond him. He is, however, highly skilled in a particular area such as television repair, or he can make routine computations such as are required in adjusting a surveying traverse.

Clearly the technologist as defined above should be able to extend his formal education through part-time study so as to qualify himself as a professional person if he desires to do so. A terminal vocational program, therefore, would be unattractive to him if he had the ambition to earn a college degree. The technician, by definition, is served better with a strictly vocational program which makes maximum use of his more limited abilities. Obviously, the relative needs for technicians and technologists will vary in the different fields of engineering.

How, then, can the junior college best serve both the technologist and the technician as well as the engineer? Before attempting to answer this question, it might be well to take a candid look at the prospective students who are likely to seek admission to the colleges. To be completely honest, one must recognize that the majority of students are of average ability and often deficient in their high school preparation. As far as candidates for engineering and technology are concerned, it would be desirable if they were thoroughly prepared in algebra, geometry, and trigonometry and had taken both chemistry and physics in high school, but at the present time this is not the case. Most students need and must take both algebra and trigonometry regardless of whether they are transfer or terminal students. This is a strong argument for a common program for all who are interested in science, engineering, or technology during at least the first term and, if possible, the entire first year.

Furthermore, one of the strongest arguments against specialized courses in the first term lies in the fact that so many young high school graduates enter college without an adequate or sound basis for choosing a narrow field of specialization. This, of course, is the primary justification for engineering orientation during the first term. Obviously, the longer the final choice of curriculum can be postponed for these students, the better will be the chance that this important decision will be soundly based.

If a common program can be arranged initially, there is then an opportunity to counsel these students on the basis of their performance and their indicated ability. Those with sufficient ability and motiva-

tion will naturally seek the pre-professional program and eventually transfer to an accredited engineering school. For those who find advanced mathematics too difficult, the vocational-technical terminal programs are available. The remaining group of potential technologists should be encouraged to seek professional rather than vocational training.

Many students in this latter group whose interests lie in the "art" rather than the "science" of engineering probably would do well in one of the presently unaccredited four-year programs where the emphasis is on technology. Clearly their pre-technology course ought to parallel closely the present pre-engineering program. For those in this group who have the ability and motivation but who for personal or financial reasons cannot continue to the baccalaureate degree, the basic engineering sciences and mathematics supplemented with one or two specialized courses such as advanced drafting, surveying, or electronics should enable them to obtain technical employment and provide a sound basis for later part-time advanced study. Furthermore, in view of the rate of acceleration of technological change apparent today, a sound foundation in basic scientific and engineering principles is in the long run likely to be of greater value to these students than a highly specialized course in aircraft engines or color television.

In other words, two years of college do not provide sufficient education for the technologist of the coming generation, and, therefore, the soundest program will be one which is basic in nature and not greatly different from a pre-engineering program, at least in the first year. At this point, the writer heartily endorses the

guiding philosophy which Sacramento Junior College has followed in the development of its engineering technician (or technologist) programs as outlined by Lillie and Stockwell,<sup>1</sup> for ultimately there must be a distinction between the vocational and professional approach to this problem.

Local conditions, of course, may modify the general conclusions outlined above. A junior college located near a large aircraft or electronics plant may well offer more specialized courses to meet the needs of the local industry than will a college located in an agricultural area. Again, those institutions situated close to four-year engineering schools will probably pattern their transfer programs to meet the local requirements. The local differences, however, should not greatly affect the basic courses of the first year.

Up to this point little has been said about adult education or part-time evening programs in this field, but here is the place for the highly specialized courses designed to meet the specific area vocational needs for technicians. In general, these courses should not carry degree credit since they are essentially vocational in character. It is this extension type of course which is receiving the major em-

phasis in the new area vocational programs under Title VIII of the National Defense Education Act.

So far as accreditation is concerned, a study of the various technical institute curriculums accredited by ECPD reveals a wide divergence in scope and content. Some include only the minimum of algebra and trigonometry; others include considerable calculus. The former are clearly terminal programs; the latter need not be. Eventually ECPD will have to recognize this difference and revise its basis for accreditation accordingly.

Under the impetus of Public Law 846 (Title VIII), the vocational educators are rapidly expanding the area vocational program for training technicians in many junior colleges. From personal observation the writer is convinced that they are succeeding in the vocational training of technicians. Those in engineering education, however, should concentrate on the pre-professional training of technologists and engineers. Both vocationally-trained and professionally-trained people are needed in the present day technological society, but any program which purports to do both is likely to do neither. Cooperation, then, is essential to the end that all students have the opportunity to choose the program best suited to their individual abilities and aptitudes. A common beginning term can provide this opportunity.

<sup>1</sup> *Junior College Journal*, September, 1959, pp. 22-23.

## Basic Materials for Florida Junior College Libraries

LOUIS SHORES AND SARAH REED

IN 1950 there were five public junior colleges in Florida; today there are 22. On the surface it may not be apparent that thousands of man hours are required to select, order, process, and service the 20,000 volumes which, exclusive of duplicate titles and textbooks, are indicated by the Standards for Junior College Libraries as a minimum book collection (*College and Research Libraries*, May, 1960). For a single professional librarian, establishing and developing a library is a staggering assignment. To give some aid in the selection of materials which will adequately support the educational programs on these new campuses, Dr. James L. Wattenbarger, Director of Community Junior Colleges, and Louis Shores, Dean of Florida State University Library School and Editor of *Collier's Encyclopedia*, initiated a series of materials bulletins prepared by faculty and graduate students of Florida

State University and published by the State Department of Education. The first two of these materials bulletins are now available. Dean Shores compiled *Reference Books*, Materials Bulletin 22CJC-1; Dorothy Poteat, Librarian, Emmanuel College, Franklin Springs, Georgia, compiled *Magazines*, Materials Bulletin 22-CJC-2.

Dean Shores' *Reference Books* sets the precedent for the various book lists both as to methodology and as to style. Following a thoroughgoing survey of Florida junior college curriculums, each compiler prepares an initial checklist by means of inspecting available materials, using standard selection aids, and conferring with faculty members and librarians. He then circulates the checklist to junior college librarians and faculty members both in Florida and outside the state. On the basis of checklist tallies, he prepares the listing which, when edited, appears in the series of materials bulletins. When sufficiently refined, each of these preliminary editions will constitute a section of the listing of basic materials for Florida junior college libraries, which is the ultimate goal of these projects.

The major limitations of the pooled judgment technique are well known. Most serious among the problems encountered thus far is the time pressure experienced

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Dean of the Library School of Florida State University, LOUIS SHORES is the author of many books and articles. At present he is serving as Editor-in-Chief of *Collier's Encyclopedia*. From 1939-42 he was chairman of the first American Library Association's Committee on Junior College Library Standards.

Formerly Assistant Professor in Florida State's Library School, SARAH REED has been working since October 1 in the American Library Association Headquarters as secretary in the Library Education Division.

both by investigators who prepare the lists and by respondents who check them. Also, the variation in the community college concept creates some question among respondents as to exactly what constitutes a basic materials collection for a junior college library. Finally, on most lists of this nature, older titles which seem to enjoy the right of eminent domain creep in but must be reexamined to determine if more timely titles are available. With all of its limitations, however, this procedure does provide a means of developing useful junior college materials lists. If, on the basis of their experience in using the materials bulletins, junior college librarians will submit suggestions for deletions and additions, the task of revision will certainly be expedited.

From years of experience in surveying book collections, Dean Shores believes, as he stated in his Introduction to the *Reference Books* list, that "the Reference collection of any college library is a key to the evaluation of the book stock in general." He has therefore included in this first materials bulletin 335 titles, chosen on the basis of checklist returns from Florida junior college librarians, which he hopes will provide the foundation for a reference collection to support student learning and faculty research. As in ensuing lists, the arrangement is by subject and in approximate Dewey Decimal Clas-

sification order. Dean Shores has also prepared an author-title index which will appear in the revised listing.

While Miss Poteat emphasized that "just as the nature of the courses offered will vary somewhat from college to college so will the need for particular periodicals," she has endeavored to prepare a basic list of magazines that will support the curriculum of the Florida community junior college. Her listing of 122 magazines, selected by librarians and faculty members of 33 junior colleges from an initial list of 291 titles, is arranged alphabetically in three sections—general and miscellaneous, subject areas as represented in Florida junior college curriculums and Florida magazines.

The third bulletin, currently in process of publication, is a listing of science books by Robert Greene, Assistant in Science and Technology, Price Gilbert Library, Georgia Institute of Technology. The lists for English language and literature and for history are now ready for editing. Other checklists of books, of audio-visual materials, and of equipment will be prepared as interested graduate students undertake them. These materials bulletins, priced at one dollar, are distributed by the Division of Publications and Textbook Services, Florida State Department of Education, Knott Building, Tallahassee.



## Should Junior College Final Examinations Be Abolished?

L. E. HOFFMAN

THE JUNIOR COLLEGE is essentially a teaching institution, and the achievement of this purpose is largely dependent upon the effectiveness of its instructional program. Students are the most important campus group; it is for them that the college and its instructional program exist. Only by making maximum use of available physical and human resources can a high quality of instruction be assured.

The examination is perhaps the most commonly used device to determine the effectiveness of good instruction. It is true that students receive real values from a college course beyond those recorded on an examination; yet a test of knowledge properly conceived and administered aids both students and instructors in crystalizing principles and understandings. For this reason, among others, college instructors make use of examinations.

Because of the accepted importance placed upon examinations, it is the purpose of this article to scrutinize more closely this educational device. The student may well ask, "Why examinations?" "Are they something to blight the student's progress or do they serve some constructive purpose?"

It is pointed out that a student's exami-

nations stimulate him to review his course work, and thus, he gains a more permanent, complete, and organized view of the course material. Since it is necessary for him to determine the relative significance of each topic in preparation for an examination, he searches out meanings which may have been passed over superficially. Procrastination, a natural human tendency, is no longer indulged in because preparing for an examination forces him out of his lethargic state. If the student is reticent about responding in class discussions, he is given the chance in an examination to demonstrate his command of the subject matter and thereby gains practice in thinking under stress. He must be able to follow directions rapidly—a functional educational experience which he will meet many times during his life. All these points argue that examinations have educational value for students.

The instructor likewise profits because he can analyze a set of examination papers to determine which areas of his instruction need further clarification, and thus he is aided in locating his effectiveness as a teacher. He can reorganize his materials, redistribute his emphasis, redirect his efforts, and so improve his instructional effectiveness. Administratively, his instructional abilities are rated along with the student's ability to master the instruc-

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L. E. HOFFMAN is Dean of Instruction at Los Angeles Pierce College, Woodland Hills, California.



tion. Selectees for scholarship awards, dean's lists, college loans, student body offices are frequently determined by course grades which in turn are influenced by examinations.

Examinations require time on the part of instructors as well as the students. Student time is required in the preparation for examinations and in taking them, while the instructor must create, administer, and score them. This is the time required in the measurement of effective instruction generally considered essential to good teaching. For this reason examinations might well be thought of as being integral parts of a course.

While the frequently given quizzes or examinations offered during a semester's course work are an integral part of the total course, the traditional final course examinations violate this educational concept. They are generally given during the last week of a semester without being returned to students and thus do not offer students an opportunity to analyze their work for educational growth. Is this time wasted and would it be better spent by continuing instruction during the final semester weeks?

In a survey of California junior colleges, the writer found that 55 of the 63 colleges administer final examinations during the final week of each semester. Several colleges stated that "students failing to take these examinations will forfeit the right to receive any credit for the entire course. Absence due to illness will be excused only when verified by a physician's excuse in writing." One college reported that "two-hour final examinations are required in all courses except physical education. No student will be excused from taking a final examination." Another

college replied that in addition to the semester final, "mid-term examinations are normally given in the academic course during the eighth week of the semester. Students failing to complete the mid-term examination requirement will not be allowed to attend final examinations and will receive a grade of "F" in that subject." These requirements put a heavy emphasis upon final examinations and seem to indicate that they are vastly more important than day by day class work and preparation.

In an informal questionnaire sent to 25 instructors in one college the following data were secured:

1. I prefer finals be given as now conducted—a special time being set aside each semester. Yes: 22 No: 3
2. I prefer that no special time be set aside but that I be allowed to give examinations in my classes throughout the semester as I see fit. Yes: 3 No: 22

From this group, the overwhelming reaction was towards the retention of scheduling special times for final examinations.

Why do thousands of college instructors want to devote a final week of each semester for final examinations requiring hours of preparation, hours to administer these examinations, hours of time to correct and grade these examinations with no opportunity for their students to ever see their final results?

From the instructor's replies some seven reasons which they hold valid are indicated.

1. Final examinations are a traditional college pattern. One of the functions of the junior college is to prepare students for transfer to four-year institutions. Since it

is a common practice in these colleges and universities to have long final examinations, junior college students should have prior experiences in preparing for such examinations. The special semester final examinations provide students with mental training in preparing for this educational level.

2. There is student psychology involved. Junior college students expect to follow the custom of final examinations; otherwise there is the feeling that they are merely following the high school program. This is a collegiate pattern as contrasted with a high school pattern, and the successful completion of a college final examination provides the student with satisfaction, a feeling of completing a task, and a fitting climax to a college course.
3. Final examinations serve as a stimulant to both instructors and students. As a semester comes to a close there is a tendency to "let down." Final examinations, with their resultant influence on course grades, tend to keep instructors and students working and on their toes. Without finals, many students would fail to attend the last weeks of classes.
4. Final examinations offer instructors definite benefits. The final week provides instructors with time to appraise student's work and to submit their final grades to the admissions office. There is time to close the work of one semester before meeting the responsibilities of the next. Final examinations aid the instructor in deciding on borderline student grades.
5. For the student, final examinations allow him to demonstrate his mastery of material in which he had earlier failed.
6. The final examination permits a time for summing up the principles and concepts of an entire course. The great mass of minutiae offered in every college discipline commonly obscures the more important broad principles, and the student fails to see the forest because of the trees. Reviewing the entire course under the stimulus of a final-to-come helps the student establish these broad associations which he may have heard from the instructor but which

he must "discover" for himself. Often the most deep-seated learning occurs in "sweating out" the challenge of a final examination.

7. Final examinations prepare students for future life situations. The importance of comprehensive examinations is increasing not only in colleges but also as a means of qualifying individuals for a wide variety of positions in life outside the college. The college owes it to its students to provide them with experiences in taking such comprehensive examinations.

Other college instructors thinking about this problem suggest reasons why it might be more economical educationally to continue their teaching throughout the semester and offer the following points:

1. Final examinations create great emotional strain and tension for students. This unnatural condition may be relieved through offering many tests throughout a semester rather than emphasizing finals.
2. There is an accumulative worth in frequent student evaluation. The testing of course units is a fairer indication of the student's accumulative and progressive assimilation of information and learning.
3. Requiring frequent examinations is more conducive to the development of good habits of regular study and budgeting of time on the part of students.
4. It is recognized by most instructors that in a semester's time, the instructor should have enough data to assign correct and fair grades to students long before it is time to offer a final examination for this purpose. Correlation studies indicate that students doing well throughout their semester's work will do equally well on a final examination. Why, then, take time to give a final examination?
5. The final examination violates the concept that course evaluations should be an integral part of course work.
6. The final which consumes hours of instructor time in its grading is seldom seen by the student and so has no educational benefit to the student.

The college administrator sees a financial loss to his district in designating final weeks of each semester to final examinations. A.D.A. may be counted only for students attending regular classes. A student having a three-hour class during the week would attend a two-hour final examination and thus lose one hour of regular class attendance; in four-hour classes he would lose two hours; in some laboratory-lecture classes of nine hours he would lose a total of seven hours of regular class time. The average college student takes five classes; thus the loss is multiplied. In a college of several thousand students, this loss rapidly mounts to a sizable sum. Frequently the examination schedule allows most of the final examinations to be concluded within three or four days of the week. Instructors are paid for the additional days without having teaching responsibilities. This factor adds to the financial consideration attached to the traditional final examination weeks.

It would seem that all junior college instructors are not agreed upon the traditional pattern of final examinations which have, perhaps, been inherited largely from the senior institutions. Those that approve offer some strong points in defense of continuing the pattern, and yet there are some instructors who feel the compulsion of teaching so strongly that they would prefer to use the maximum time for this activity while considering the examination as an integral part of the whole teaching process. There are financial considerations to be weighed in the interests of the best use of time and effort for instruction. It is obvious that each junior college, with the aid of its faculty members, will need to weigh the values and procedures of its final examination pattern in the interest of the most worthy use of educational time and effort.

# A Language Laboratory Approach to Teaching English to the Foreign Student

ADELYN I. BONIN

DIFFICULTIES FACING the adult education instructor teaching English to the foreign born student range from a lack of adequate textbook material to the problem of never being able to close his class against the continuous stream of new applicants. In between these two problems are the equally important ones of lack of adequate preparation time, heterogeneous class structure and student mortality.

Each problem seems to dovetail into the other. Lack of adequate, ready-prepared material from which to teach means that the instructor must supplement the text with his own ingenuity. For every hour of classroom time, several additional hours are needed by the instructor to plan thoroughly all the extra material needed in order to meet the problem of a heterogeneous class.

Five strong variables are constantly threatening the efficiency of an instructor in English for the foreign born:

1. Age of the students which runs from teenagers to grandparents.
2. Socio-economic backgrounds which vary from the university graduate to the person who never completed elementary school, bringing together doctors, engineers, mechanics, artists, tailors, shoemakers and housewives.

3. Abilities which run the gamut of the intelligence quotient scale.

4. Level of English performance at enrollment varying from the person to whom the written alphabet is foreign, to the student whose vocabulary and writing ability permit basic communication.

5. The nucleus of the class is constantly changing due to

a. new arrivals throughout the semester to whom immediate English instruction is vital for their economic and social existence

b. continual drop-outs of students who reach a point of basic performance which meets the demands of their employment level and satisfies their personal standards.

Somewhere there had to be an answer to these difficulties. After a long look at these problems at Orange Coast College, it became apparent that the language laboratory, which has become an accepted part of foreign language teaching, should be utilized to open new techniques for teaching English to the foreign born.

In a typical class taught without the language laboratory, the instructor is immediately put in the position of trying to split himself into 30 parts to give individual attention to each person. According to his background each student has different pronunciation problems. When the instructor spends time with one student, the others are left mumbling uncertainly to themselves as they try to proceed with the

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ADELYN I. BONIN is Instructor of English and German, Orange Coast College, Costa Mesa, California.

lesson. There is much hesitancy as the instructor tries to get the class to read and pronounce the lesson together. He must strain to catch mispronunciation in the faltering chorus. Adult students are shy to speak out. Some only go through the motions, too frightened to make the initial attempt which is so important in getting started.

Even if the instructor separates the class into ability or language background groups, he still finds himself being divided among these groups in an effort to reach the needs of all. Each class session brings a new student who must start from the beginning after the others have progressed into more advanced work. Late enrollees cannot be denied entrance to the class if the adult education program of the college is going to fulfill its obligation of meeting these students' needs. But enrolling students throughout the semester means that the class is never together at the same point of progress in the subject and that the instructor is always starting the course for someone new while he is trying to guide the progress of the others.

In a language laboratory each student takes his place in a soundproof booth where he finds a headphone, a microphone and a control panel. Shyness falls away as the student realizes that no one but the instructor can hear his awkward beginnings. The instructor now clearly hears the pronunciation of individual students as he monitors them, one at a time. When he hears a mistake he corrects the student without disturbing the rest of the class because there is always two-way communication between the instructor and each student. Whereas the student without the use of the language laboratory has only a few minutes of actual

speaking time, in a laboratory he participates actively during the entire hour.

A complete course with correlated text and tapes is now being prepared by the author. These tapes will allow each student to experience the language through the simultaneous, four-pronged learning approach of speaking, listening, reading and writing. In creating the tapes, varied means have been used to draw the student into participation which is so essential to his learning. A tape may instruct the student to repeat words or sentences after the voice on the tape; pauses in the tape are allowed for this. The tape may instruct the student to write sentences or to answer questions. At all times learning in the four areas is going on. The student hears several voices on a well-prepared tape, and thus his ear becomes accustomed to different intonations in speech. Pronunciation used in the beginning tapes is slow and precise so that recognition of sounds is easy. As the lessons progress, pronunciation on the tapes becomes more conversational.

As the students follow the tapes with listening, speaking, reading and writing, the instructor monitors each person's progress. He smooths out individual problems with private attention to each student, while the rest of the class continues with the lesson. Full use of class time is accorded each person as the tape carries him on through the lesson. If the lesson is too advanced for slower students, the instructor tells them to switch their receivers to a review lesson which can be transmitted from a second master tape machine. The problem of varied linguistic backgrounds diminishes with the use of a special introductory tape in which basic instructions are given in several languages,

thus making the use of the laboratory itself clear.

When a new student comes into the class after the semester is well underway, he presents no problem to the instructor using the language laboratory. He selects the tape which matches the ability of the student, and there is no interruption in the progress of the rest of the class.

An evaluation of methods of teaching English to foreign born adult students and application of the language laboratory to this specialized teaching problem is important to every junior college which is called upon by its community's needs to present an efficient and quick road to English learning for foreign born students.



## From the Executive Director's Desk

EDMUND J. GLEAZER, JR.

### JUNIOR COLLEGES ARE REAL COLLEGES

Do junior colleges tend to become four-year colleges? There is no simple unequivocal answer to this question. Apparently some do and some don't. And parenthetically, some should and some shouldn't.

During the past four years, in the period between the publication of the 1956 and 1960 issues of *American Junior Colleges*, 40 junior colleges either became senior institutions or were in the process of transition. Thirteen of these institutions were publicly-supported and 27 were under private auspices. Of the private colleges, 17 were church related and ten independent. Only six of the publicly-supported junior colleges becoming senior colleges during the four-year period were institutions separate from a university or other senior college. The other seven were in effect extension centers. The fact that six publicly-supported community junior colleges out of a national total of more than 350 institutions of this kind changed their programs to a four-year type would not indicate any substantial trend in this direction. This impression is similar to the findings of W. C. Eells and S. V. Martorana in 1957.<sup>1</sup> On the other hand, 27

of 275 privately-supported junior colleges became senior colleges, signaling more of a tendency for these institutions toward four-year programs.

In the same four-year period, 79 new junior colleges were established: ten church related, six independent, and 63 publicly supported. The state of Florida leads the list with 18 new public institutions and one private. New York, Maryland, and California follow with new institutions ranging from 13 down to five.

### BASIC CHANGES TAKE PLACE

In regard to church-related and independent junior colleges, it seems timely to raise some questions. What are the basic reasons for determining a change in the character of the college? Evidence is rather plentiful that there will be a change in the characteristic nature of the institution—it is just not a matter of adding two years of upper division work. For example, Eells and Martorana<sup>2</sup> in another study examined the curricular changes in two-year colleges that became four-year colleges. They found, on the basis of evidence gathered by analyzing catalog statements, that the change in status brings with it a de-emphasis of "terminal" curriculum offerings. Both the public and

<sup>1</sup> W. C. Eells and S. V. Martorana, "Do Junior Colleges Become Senior Colleges?," *Higher Education*, 13:6:110-15, February, 1957.

<sup>2</sup> W. C. Eells and S. V. Martorana, "Curricular Changes in 2-Year Colleges That Become 4-Year Colleges," *Higher Education*, 13:8:149-153, April, 1957.

private junior colleges which changed to four-year status drastically reduced these offerings. One-year programs were cut back even more than the two-year terminal curriculums.

The kinds of students admitted, qualities and interests of teachers, relationships with other colleges and universities, cost of the college program, number of students to be served in a given plant during a four-year period, types of programs offered, character and emphasis of the student personnel program, all will be greatly affected as the college establishes a four-year program. This is not to suggest that a change of this kind may not be advisable or appropriate, but we are calling for careful evaluation of the factors involved.

#### WHAT ABOUT CORPORATE SUPPORT?

Occasionally advanced is the view that the nation's large foundations and corporations give little heed to junior colleges, and therefore a four-year college of the more traditional kind stands a better chance of financial assistance. Is this really a leading consideration upon close analysis? It is true the Corporate Alumnus programs initially were limited in general to four-year colleges. However, under the leadership of General Electric and other pioneers in this field, more than half of the corporations now include junior colleges. The latest large program to be announced, that of the Ford Motor Company, specifies as eligible those institutions of higher education listed in Part III of the United States Office of Education Directory and private secondary schools with college preparatory programs.

The Council for Financial Aid to Education has demonstrated interest in junior colleges through its sponsorship of a sem-

inar for junior college presidents at Long Beach, California, and inclusion of presidents of private junior colleges in other seminars for college and university presidents held in various sections of the country. An experimental conference for presidents of public community colleges is to be held this year.

Foundations such as Sears-Roebuck, W. K. Kellogg, Carnegie Corporation, Fund for the Advancement of Education, Lilly Endowment, United States Steel, and others have demonstrated growing interest in junior colleges. The important factor to such foundations seems not to be whether the institution is a two-year or four-year college but the quality of the proposal it makes and whether or not it is within the present program interests of that foundation.

#### THE CHURCH-RELATED JUNIOR COLLEGE

Church-related junior colleges may represent one of the finest ways for young people of the many church denominations to have a collegiate experience among persons of similar faith and interests. If it is considered desirable for Methodists, or Baptists, or Latter Day Saints, or Catholics to have at least a part of their college life in a campus atmosphere conditioned by these religious values, and if these church groups are not planning to establish many new institutions or greatly expand the capacity of present plants, will it not be true that the growing number of young people wanting to attend such colleges can be served in larger numbers in junior colleges where they can stay for two years rather than in four-year institutions? It might be necessary in time for church groups to choose between accommodating

large numbers of their students for two years or a smaller number for four years.

Church-sponsored colleges might give consideration to patterns of organization adopted by publicly-supported higher education in some states. These call for decentralization of lower division opportunities and centralization of upper division and graduate work. Arguments can be made for economical and effective utilization of faculty as well as physical resources under such a plan. At least one church organization has adopted a similar approach. The new Concordia Senior College at Ft. Wayne, Indiana, offers upper division work only and receives graduates from a number of Lutheran junior colleges.

#### HOW DOES JUNIOR GROW UP?

Very often a junior college is under heavy community pressure to become a senior institution. An example of editorial comment reflecting community views is found in a newspaper article which comments on the establishment of a new community college. The editorial closes with the following sentences: "The community has reason to be proud of its new college. And some day when the college becomes a four-year institution, we will be prouder still. We trust it won't take too long."

Such statements reveal a lack of understanding or appreciation of the role of the junior college as an institution in its own right. A junior college, properly conceived, is not the necessary initial stage of a developmental process which climaxes in fulfillment when the institution becomes a senior college. Rather, it is helpful to think in terms of horizontal differentiation of functions. The work of the junior college is somewhat different from

that of the senior college and the work of the senior college different from that of the university. There is no benefit to the public or students if each tries to become what it is not. There is great benefit when each kind of institution clarifies its reason for being and achieves high quality in fulfillment of its own purposes. Rather than conceiving of these various kinds of collegiate institutions as rungs in a ladder with the junior college on the bottom and the university on the top, it is well to think of them as similar to cylinders in an automobile motor. As each piston works in its own cylinder, power is delivered to move the vehicle. In some areas a junior college, senior college, and university exist practically adjacent to each other and each has its important place in working toward goals that are different.

Competent teaching personnel and financial resources are limited and probably always will be. Increasing population and the growing percentage of these numbers wanting to go to college will tax our resources and ingenuity. Our need is to meet the requirements of both quality and quantity as opportunities for higher education are kept available. Ways must be found to use our best teachers and our money economically and effectively. The junior college is one of these ways.

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#### BOARD OF DIRECTORS MEETS

The Board of Directors of the American Association of Junior Colleges held its summer meeting at the Y.M.C.A. of the Rockies in Estes Park, Colorado. Meeting with the Board was the Council on Research and Service.

Approved as new members in the Association were Baptist Institute for Chris-

tian Workers, Lourdes Junior College, and Church College of Hawaii. Highland College, Highland, Kansas, was reinstated as an active institutional member, and the status of Mt. Vernon Community College, Mt. Vernon, Illinois, was changed from provisional to active.

The theme selected for the 1961 convention at Washington, D.C., was: "America's Stake in the Junior College." Dates of the meeting are March 1-3, 1961, at the Sheraton Park Hotel.

The Board reviewed activities of the research and service commissions and authorized new projects. Sessions of the Commissions on Legislation and Instruction followed the Board meetings.

In addition to action on the budget of the Association, the Board extended the appointment of the Executive Director and staff members William G. Shannon, Thomas Merson, and Elizabeth Reed.

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#### GUIDES TO STATE LEGISLATION

Under the chairmanship of Kenneth Skaggs, president of Chipola Junior College, the Commission on Legislation of AAJC met at the Y.M.C.A. of the Rockies in late July. Attention was directed primarily to rewriting a document issued by the Association earlier entitled "Suggested Procedures and Techniques for Initiating and Developing Legislation for a State Plan for Community Colleges." The revised document will be published in November. The Commission prefaced its recommendations with a statement of principles which it described as growing out of the experiences of the member institutions of AAJC.

1. Opportunities for post-high school education should be available, geographically and

financially, to every qualified citizen of the state.

2. The state should be responsible for regulation and for substantial financial support.

3. The community junior college should have its own administrative organization, be responsible to its own independent board of control, and have its own separate plant and facilities.

4. The community junior college should be locally controlled.

5. The local controlling district should coincide as closely as possible with the geographic area served by the college.

6. Curricula of the community junior college should be comprehensive.

7. Programs of the college will include
- a. university parallel programs for the freshman and sophomore years.
  - b. general education programs.
  - c. vocational, technical and semi-professional programs.
  - d. continuing education (adult education).
  - e. community service programs.
  - f. Services in the fields of testing, guidance and individual development.

The Commission acknowledged that it might not be possible for all of the recommended principles to be realized initially but strongly recommended that avenues for development along the indicated lines be kept open.

\* \* \*

#### COMMISSION PLANS MATERIALS FOR TEACHER RECRUITMENT

A brochure aimed at recruiting junior college teachers will be published as a result of the work of the AAJC Commission on Instruction at its July meeting in Denver. The pamphlet copy will include general information about junior colleges; a description of the usual tasks of the teacher; a statement of qualifications for teaching in junior colleges; and indication of the urgent need for teachers in this

field. Incidentally California alone will require 15,000 new junior college teachers by 1975. Florida needs more than 100 new junior college teachers each year. Also presented in the publication are reasons why teaching in the two-year colleges is a rewarding profession. The pamphlet will be widely distributed. Dr. Robert Hannelly, dean of Phoenix College and chairman of the Commission, has assigned

high priority to the pamphlet project. Other activities of the Commission include plans to issue periodically a loose-leaf "Good Teaching Practices" notebook based on unpublished manuscripts of "This I Tried and Found Helpful," which is a feature of the *Junior College Journal*. Two research studies for which funds will be sought are on independent study and sub-freshman English.

# The Junior College



EDMUND J. GLEAZER, JR.

*Phenomenal growth of Florida's community junior colleges has been reported to the State Board of Education by Thomas D. Bailey, Superintendent of Public Instruction. In the fall of 1956, there were four junior college areas supporting five junior colleges; in the fall of 1960, there are 14 junior college areas supporting 24 junior colleges. In 1956 only 17 per cent of the high school seniors lived within commuting distance of a junior college; this year 58 per cent of the high school seniors will be living within commuting distance of a public junior college. In 1956 there were 4,470 students enrolled in public junior colleges, and this year more than 15,000 students will be enrolled. In 1956 there were approximately 167 junior college faculty members, whereas this year there will be more than 800 faculty members.*

For the past two years 75 per cent of Florida's freshmen who live in counties where junior colleges are available and who attend college in Florida have enrolled in one of the public junior colleges. In several counties, as many as 90 per cent

of the Florida freshmen attended the local junior college. In 1957, 12 per cent of the total college enrollment in Florida was in public junior colleges. In 1959 more than 18 per cent of the total college enrollment was in community junior colleges.

Fifty-two per cent of the 1959 high school graduates attended college from counties where junior colleges were located. In counties where junior colleges were not available, only 40 per cent of the 1959 high school graduates attended college.

The 1955, 1957, and 1959 legislatures have appropriated funds to the junior colleges for capital outlay purposes totaling a little more than \$14,000,000. With the 1959 appropriation alone, more than 140 classrooms and laboratories have been constructed in the various junior colleges.

Interesting developments have taken place in curricular fields. Pensacola Junior College has demonstrated sensitivity to local industrial needs through an electronics program which will involve the use of a sub-critical nuclear reactor. Pensacola Junior College is the first junior



college in the nation to be approved by the Atomic Energy Commission to receive a license to use fissionable materials.

Registered nurses' programs have been developed at four junior colleges. Programs for senior citizens are offered in several institutions, and language laboratories have been developed by all of the junior colleges.

\* \* \*

*Legislation passed during the last regular session of the Arizona Legislature has resulted in appoin. nent of a 17-member board to serve as a State Board of Directors for Junior Colleges. Senate Bill No. 43 outlines the powers and duties of the new governing board. The state board consists of 14 members, one from each county, appointed by the governor with the advice and consent of the senate, a representative of the board of regents, the superintendent of public instruction, and the director of the division of vocational education. Among its general powers, the board can determine the location within the district of the junior college and purchase, receive, hold, make and take leases of and sell real and personal property for the benefit of the state and for the use of the junior colleges under its jurisdiction. The state board will also exercise general administrative powers including setting of standards for establishment, development, administration, operation, and accreditation of junior colleges.*

The new legislation specifies that the state, by legislative appropriation, shall pay a sum equal to 50 per cent of the total cost for capital outlay for any district, but not to exceed \$500,000. In addition, by legislative appropriation, the state shall pay for each full-time equivalent student in a junior college the sum of

\$115 per capita per annum for capital outlay.

State level assistance toward operating budgets will be provided in the following manner:

1. For the first 320 full-time equivalent students, \$525 per capita per annum.
2. For all full-time equivalent students in excess of 320, \$350 per capita per annum.

To be eligible for state aid, a district shall:

1. Be equipped with suitable buildings, equipment and campus approved by the state board.
2. Have 320 full-time equivalent students attending in the district.
3. Have complied with all of the requirements of the state board including budgets and curriculum.

*The admission of twelfth-grade high school students to junior colleges was authorized in the 1959 session of the California Legislature. As it appears in the Education Code, Section 5706.5 states:*

The principal of any two-year junior college may admit to the junior college as a special part-time student any twelfth-grade high school student whose admission is recommended by his high school principal. A principal of a high school shall not recommend a number of twelfth-grade high school students in excess of 5 per cent of the total number of twelfth-grade students enrolled in the high school at the time of recommendation.

The attendance of a student at junior college as a special part-time student pursuant to this section is authorized attendance and the student shall receive credit for junior college courses which he completes in the same manner as if he were a regularly enrolled junior college student.

Each special part-time student shall attend high school classes for at least the minimum schoolday.

Hugh G. Price, Chief of the Bureau of Junior College Education, reports that in

the second semester of the 1959-60 college year 49 out of 62 public junior colleges enrolled superior high school students. A total of 897 students were enrolled for 3,090½ units of credit in 365 different courses. According to Mr. Price, "While numbers are not in themselves evidence that the program has been successful, many indications have been received that the superior high school students, as well as their college teachers, believe that there are significant advantages to the program for both the acceleration and enrichment of their education. There is ample evidence that the legislation has been received enthusiastically and implementation has proceeded at a rapid pace."

\* \* \*

*Stephens College, a residential college for women at Columbia, Missouri, has been awarded a grant of \$160,300 by the Ford Foundation's Fund for the Advancement of Education. The grant, being awarded over a three-year period, will enable Stephens College to initiate an experimental educational program to be known as the College House Plan. Through this plan, states Dr. Seymour Smith, president of Stephens, the college will initiate an experiment in developing new patterns for integrating a basic program of general education, using residential facilities as a center for learning.*

The College House Plan will allow Stephens to develop new patterns in using faculty and counseling staff, greater flexibility in class organization and scheduling, and new emphasis on independent study by students. The grant also will provide support in Stephens' exploration of new ways to organize and integrate a core of basic courses and new uses of closed-circuit television for instruction.

Under the plan, which began operation in September, 100 students will reside in one residence hall. These students are taking the same group of five courses under five faculty members working in close coordination with each other. The courses are General Humanities, Beginning Psychology, Contemporary Social Issues, Communication, and Ideas and Living Today. One of the five faculty members is a residence counselor, living with the students. The team of faculty members has offices and conducts many classes in the residence hall. Whenever possible, closed-circuit television will be utilized in the residence hall.

\* \* \*

*A State Board of Education report entitled College Opportunity in New Jersey has suggested that in the years to come the two-year comprehensive college might serve a large number of qualified youth seeking specialized programs of instruction. In order to provide background for the State Board of Education and the Department of Education in planning for higher education, a state committee has been appointed to study community colleges and technical institutes. The 19-member committee represents both the public and private schools and colleges as well as the interests of industry. The committee is studying not only types of programs and opportunities to be developed but also the legal and financial arrangements which would best be suited to the needs of the state.*

\* \* \*

*Dr. Lawrence L. Jarvie, formerly Executive Dean for Institutes and Community Colleges of the State University of New York, has been selected as the new president of the New York City Community*

College of Applied Arts and Sciences. The selection of Dr. Jarvie to head one of the larger community colleges in the country was formally approved by the trustees of the State University on September 15. Dr. Jarvie fills the vacancy created last April by the death of Dr. Otto Klitgord.

The college has embarked on an expansion and development program that will cost more than \$11,000,000. In his leadership role in the expansion of community colleges in the state of New York Dr. Jarvie has worked closely with the Brooklyn institution since its founding in 1947.

\* \* \*

*President Clark Kerr of the University of California* has invited a small group of individuals who occupy responsible positions in government, industry, labor, and education to a conference on the two-year college which is scheduled for December 5 and 6 in Berkeley. The University, through its Center for the Study of Higher Education, and the American Association of Junior Colleges are co-sponsoring the conference. A grant from Lilly Endowment, Inc., supplemented by funds from the Carnegie Corporation, will meet the expenses of the meeting.

In his letter of invitation President Kerr presents reasons for the conference. There is much discussion concerning the increasingly important role played by the two-year college and its ultimate place in American higher education. Those who study it are cognizant of its potentiality, its problems, the question of its relationship to other segments of education, and matters concerning its most appropriate organizational and financial structure.

The Center for the Study of Higher Education, as well as other organizations and individuals, has recently completed

various studies on this type of institution. Now that new data concerning it are available, both the Association and the University believe this is an appropriate year for such a conference.

\* \* \*

*The first community college under the Massachusetts Board of Regional Community Colleges* opened in September with Thomas E. O'Connell as director. The college is located in Pittsfield and will serve Berkshire County and western Massachusetts. The Massachusetts Board of Regional Community Colleges was established by the legislature at the request of Governor Foster Furcolo. In addition to the Berkshire unit, the Board's eventual plans include colleges in the area of Greater Boston, Cape Cod-Hyannis, Fall River-New Bedford, Lawrence-Lowell-Haverhill, Quincy-South Shore, Salem-Lynn-North Shore, Springfield, and Worcester.

\* \* \*

*Grants totalling \$462,500 to Michigan's* three largest universities have been made by the W. K. Kellogg Foundation to enable setting up junior college leadership programs in each institution. Identical sums of \$125,000 have gone to Michigan State University, the University of Michigan, and Wayne State University for launching the programs aimed at improving preparation of practicing and potential administrators of junior colleges.

A fourth grant of \$87,500 will finance the establishment and operating expenses of a state coordinating council. In addition to coordinating, the council will examine means of facilitating cooperation between the three universities in pooling resources and joint planning for student recruitment, the sharing of educational

features, research in the administration of junior colleges, program evaluation, placement of graduates, and liaison with many interested educational institutions and agencies. It will also explore possible machinery and the feasibility of maintaining cooperative university arrangements beyond the four-year period of the grants.

These new programs are the first of their kind in the Midwest; their establishment follows Kellogg Foundation grants of nearly \$1,200,000 for similar junior college administrative training programs being sponsored by the University of California both at Berkeley and Los Angeles and Stanford University (collaborating through a special Coordination Project),

by Teachers College of Columbia University, the University of Texas, and the University of Florida and Florida State University, with the latter under the Florida Board of Control.

The statewide coordination efforts in California, Florida, and Michigan may result in significant contributions toward an evolving pattern of the administration of higher education. The experience gained in institutional cooperation should help throw light on more effective and economic utilization of academic personnel on an inter-university basis and on the practicality of the exchange of students and of special courses open jointly to students in each participating university.



## Recent Writings... **JUDGING THE NEW BOOKS**

*Laboratory Exercises in Science for Living: Biological Backgrounds and Human Biology*, by Cortland R. Mapes (211 pp.; Brown; \$3.50).

The manual, *Science for Living*, consists of laboratory exercises and an outline of lectures for introductory and human biology. Prepared for a course of three laboratory hours and two or three lecture hours weekly, given in two semesters of 15 weeks each, the first part introduces beginning students to basic studies in general biology, while the second half directs study in human anatomy and physiology with some reference to examples of pathology.

The course for which the manual is intended is open to all students in the college program, is required for student nurses, medical secretaries, and medical technologists, recommended as an exploratory course for premedical students and biology majors, and elected by many liberal arts majors and education majors as fulfilling needed science requirements. In determining the scope and detail of the studies, the author was guided by the recommendations of practicing physicians, staff members of nursing school

facilities, and graduate nurses. Developed as a part of an experimental program in nursing education, the material was used with classes for seven years before publication.

Part I, *Biological Backgrounds*, provides introductory material concerning the parts and use of the microscope, cells and osmosis, mitosis, animal parasites (free-living and parasitic Protozoa, flatworms, roundworms, and arthropods), microorganisms other than Protozoa (bacteria, molds, yeasts, rickettsias, and viruses), the external features, skeletal, muscular, digestive, urogenital, circulatory, respiratory, and nervous systems of the frog, embryology, and genetics.

In Part II, *Human Biology*, the anatomy of the cat is studied by systematic dissection and correlated with human anatomy, using, in addition to the cat, the human skeleton, separate bones, and models. Laboratory exercises include the skeletal, integumentary, muscular, excretory, genital, digestive, respiratory, circulatory, nervous, and endocrine systems.

A single unit generally includes materials needed for the study, introduction



of helpful background information, and an explanation of the laboratory exercise. Names of important structures are underlined and the parts described. Following the study of the laboratory material, there are usually arrangements for the student to prepare and label drawings or diagrams of significant structures. Prepared outlines, diagrams or drawings are included for the more complex studies. Some exercises, particularly introductory ones or those of a more general nature, are developed around demonstrations with a series of questions and blanks to be answered and filled in by the student as a means of helping establish desired understandings. Rearrangement of names of parts to show relations of structures in vital processes is used frequently. The general trend is toward the study of a limited number of the principal parts of a considerable variety of organisms, especially those of greater human interest and medical significance. Individual instructors may possibly prefer to vary the order of the sequence in some of the studies, which can be effected, it seems, without difficulty. There may be slight variations in preferences with regard to the formation of the plural of some words, which can be managed without serious problems.

L. M. Outten  
Mars Hill College  
Mars Hill, North Carolina

*Small-Group Discussion in Orientation and Teaching*, by Randall Hoffman and Robert Plutchik (168 pp.; G. P. Putnam; \$4.00).

This book, although aimed primarily at those persons in the teaching or administration of freshman orientation,

should be of value to others interested in small-group discussion as an educational method. The authors briefly review extensiveness of orientation programs for beginning college students in the first chapter and point out their limitations. They indicate these programs have limited student participation and have been confined to limited periods of time.

Orientation, adjustment, or accommodation to any new situation is supposedly best accomplished through active participation. The small group approach, with proper leadership, gives the novice an opportunity to interact with others. This give and take should facilitate the development of attitudes and appreciations necessary to adjustment to a new situation.

In Chapters III, IV, and V, it is pointed out that the effective small-group leader must establish an atmosphere conducive to individual participation and through activities, techniques, and devices facilitate positive individual contributions toward goals appropriate to the group. These chapters give many suggestions which, if followed, would increase the effectiveness of a novice interested in using the small-group approach as a teaching technique in regular college courses or in freshman orientation.

In Chapters VI, VII, and VIII, the authors deal more specifically with the use of the small-group technique in orientation courses. Chapter VIII emphasizes that the orientation faculty should be familiar with the philosophy, activities, techniques, and devices which will make the small group approach more effective.

The authors recognize the need for individual counseling as a supplement to



the small-group approach to freshman orientation. In the concluding chapter there is an attempt to set out some implications of group-centered leadership for other teaching.

The writer would recommend this book as worthwhile reading for teachers who have had little training or experience in using the discussion method of teaching. The novice should also have an opportunity to read other materials which might more adequately detail the psychological foundations underlying the advantage and disadvantages of the discussion approach to teaching.

Thomas Y. Whitley  
Columbus College  
Columbus, Georgia

*The New American Guide to Colleges*, by Gene R. Hawes (256 pp.; The New American Library; \$.75).

Are you having difficulties deciding which college to attend? According to the author of this compact paper-back college encyclopedia, "Choosing a college is nearly as difficult as choosing a husband or a wife, and for the same reason. The physical characteristics are apparent, but the personality is elusive." Some colleges are cold and reserved, bound in tradition; others are bubbling with enthusiasm and energy. Some are drenched in religious atmosphere, while others are restless, searching, and skeptical. Some colleges require a high tuition and others are relatively inexpensive and even provide generous scholarship grants. Your future opportunities in life may well be shaped by the college you pick. This book gives a systematic breakdown of most of the essential facts about practically any college one might wish to attend.

This authoritative information concern-

ing more than 2,000 colleges in the United States and its territories is provided mainly for the use of high school graduates. The author cautions that the information in the "college entries" is to be considered only as first word. Anyone wishing to apply for admission at a specific college should write the college's office of admissions. In any case, the general purpose of this work is to acquaint the reader with the whole collegiate world.

*How do you use the book?* (1) If you are reasonably certain of the college you plan to attend, use the "*Index to the Colleges*" located in the back of the book. Then, after reading the highly condensed information in the entry, read the introductory explanation which concerns colleges of its type. (2) If you are interested in locating "possible colleges to attend," refer to the 12 sections into which the entries are organized. This approach will lead you to the different types of colleges.

As the reader checks each section he finds that the college entries are in alphabetical order by states and then by the names of the colleges within each state. The only possible impediment to immediate understanding of the entries is the abbreviated style used to make the entries more compact. However, that problem is quickly solved by simply checking the "*Key to Abbreviations and Special Word Usage*" located on pp. 13-24. A special section entitled, "*Understanding the Entries*," located on pp. 224-241, will also enable the perplexed student and his parents to see facets of college life which he might otherwise miss.

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